The Magazine of Better School Administration

THE Nation's Schools

August

Whose Man Is the Superintendent?

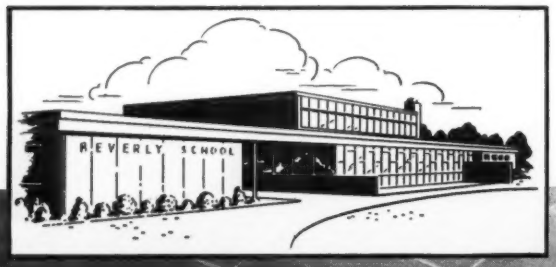
Let's Lengthen the School Year

Staff Designs Teaching Aids

N.E.A. Assembly Launches Campaign

Pupil Transportation 16 *page portfolio*

FORTY YEARS OF PUPIL TRANSPORTATION. Above: Four of Los Angeles fleet of school buses (387) on a downtown freeway. Left: Horse and buggy days. See page 45.



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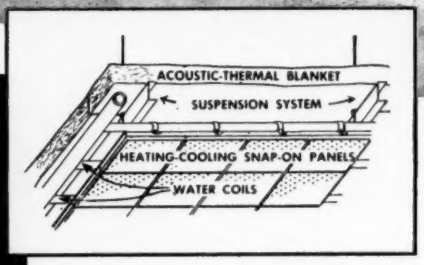

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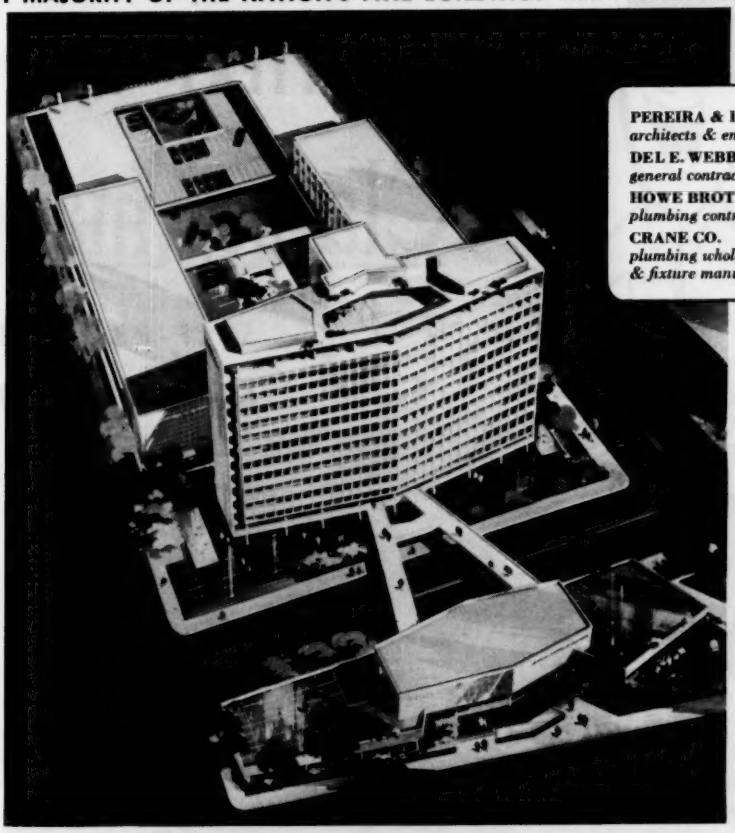

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THE Nation's Schools AUGUST 1958

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION Vol. 62, No. 2

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Tenure for Superintendents OPINION POLL

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PUPIL TRANSPORTATION . . . a 16 page portfolio

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TENURE FOR SUPERINTENDENTS . . . OPINION POLL

Most chief administrators would like guaranteed tenure, not as teacher but as superintendent, following probation period, of course

A nationwide sampling of superintendents' opinions by The Nation's Schools

THE ambiguity of many tenure laws, most of which do not specifically designate positions covered but merely identify them as those requiring teachers' certificates, has resulted in local interpretations to the effect that tenure laws apply to "teachers only." Especially has this been so in states where the question of the superintendent's tenure status has not been ruled upon by the highest courts. Consequently, only a relatively small portion of superintendents have, in practice, benefited from such laws. That being the case, should a superintendent, as chief administrator for a school district, have tenure guaranteed by law somewhat in the same manner that classroom teachers now have?

FAVOR PROBATION BEFORE TENURE

When The NATION'S SCHOOLS probed the climate of opinion on tenure for the superintendent, almost two-thirds (65 per cent) of the administrator respondents replied Yes, and less than one-third (32 per cent) voted No. About 3 per cent registered no opinion.

"A superintendent can exercise more influence for the protection of teachers and children if he does not have to build political fences and pat school directors' backs to hold down his own job," says a Pennsylvania administrator, rising to the defense of tenure.

Most of the respondents from states that have specific tenure laws for superintendents assert that experience has shown the practice to be sound.

ADMINISTRATOR'S CLINIC

In lieu of his usual Administrator's Clinic this month, Calvin Grieder discusses in a feature article a proposal for lengthening the school year and the school day. See page 28.

"Should that tenure follow a period of probation?" was the second question. This time, more than two-thirds (68 per cent) of the administrators agreed, with 1 per cent opposing and 31 per cent expressing no opinion.

One out of every two answering the second question affirmatively favored three years' probation period before tenure. One out of every four would have two years' probation, and only one out of every seven said five years.

Should the administrator be assured tenure as a *teacher* rather than tenure in his job as *administrator?* More than one-half (52 per cent) were quick to object and say No. Only one-third (33 per cent) approved of the idea and the rest—one-sixth (16 per cent) — preferred to remain silent.

TENURE FOR SUPERINTENDENTS

1. **Do you believe that the superintendent as the chief administrator for a school district should have tenure (guaranteed by law) somewhat in the same manner that the classroom teacher now has tenure?**

   Yes.....65% No.....32% No opinion.....3%

2. **If so, should that tenure follow a period of probation?**

   Yes.....68% No..... 1% No opinion.....31%

3. **Should the administrator be assured tenure as a *teacher* rather than tenure in his job as *administrator?***

   Yes.....33% No.....51% No opinion.....16%

Almost all the superintendents opposed to tenure would rather have long-term contracts averaging from three to five years. There should be a probationary period of one to two years, many of them feel, after which a contract may be drawn for a definite length of time, renewable every year thereafter. Renewal, of course, would depend upon the performance shown by the superintendent.

Three requirements are listed by a Connecticut man: (1) written contract for at least three years, (2) written statement outlining duties, and (3) more rigid professional requirements for certification.

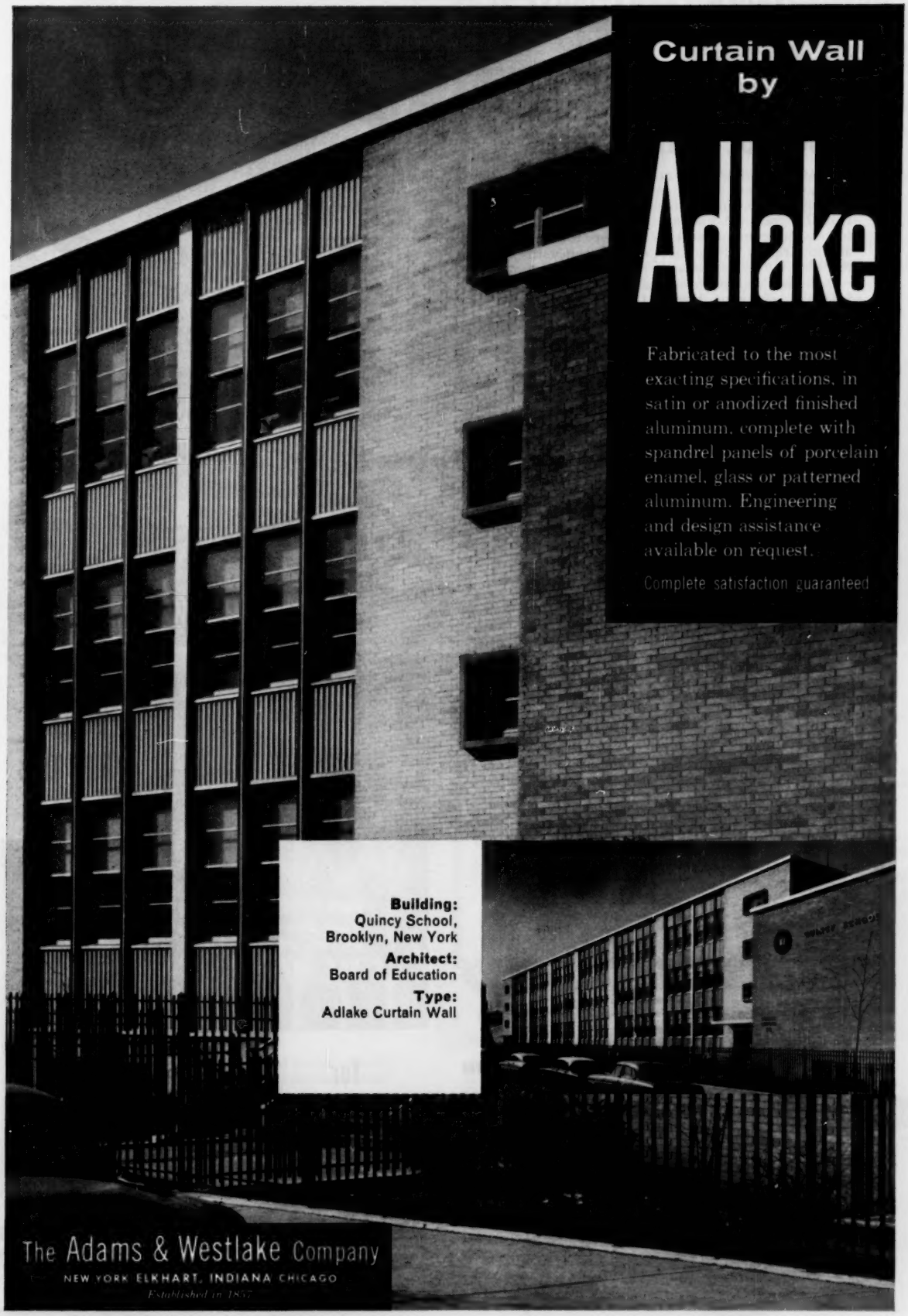
A Wisconsin administrator suggests a three-year contract that cannot be broken without a good and valid reason. A few respondents were quick to point out that a superintendent has nothing to fear about tenure so long as he is doing his best. Tenure should be based on performance, a Texan believes. "The superintendent must have the support and confidence of the board and the community. His services should not be forced on a community," an Ohio respondent asserts, with feeling.

SUGGESTS CONTINUING CONTRACT

If there is a falling-out of favor between the administrator and his school board, tenure imposes a situation that can become embarrassing, superintendents indicate. "Why should a superintendent want to stay when he knows he is no longer wanted?" ask several. "He would have to be very tired or very hungry," answers a voice from California. The best way out of a situation like this would be by the use of a continuing contract, not tenure, according to a representative from Oregon, so when the superintendent loses his effectiveness as an educational leader, he must move.

The fear that a superintendent would be left on a limb by prejudiced school boards and pressure groups who feel that his services are no longer useful can be minimized, respondents believe, by an agreement that the school board should give written notice, from 12 to 18 months before the expiration of the contract, of the intention either to renew or dismiss. That would give the superintendent enough time to make other plans and to wind up any unfinished business.

If tenure is not feasible, what are the other alternatives? Long-term contracts, point out the majority. High salaries in lieu of security, say a Florida and a North Carolina superintendent. An Illinois superintendent closes the argument with as final a statement as anyone can get: Tenure or none at all! #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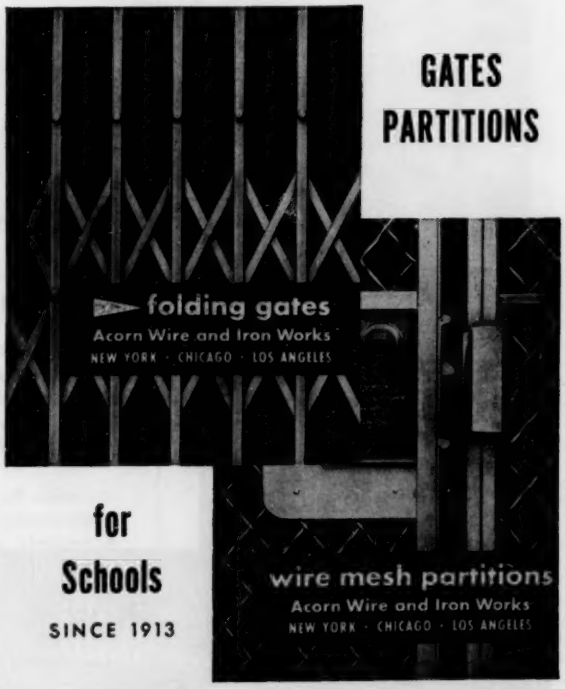

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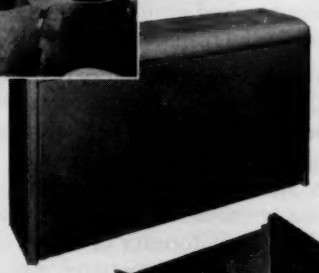

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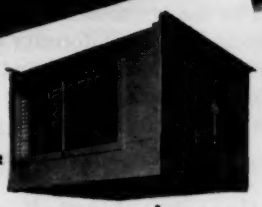

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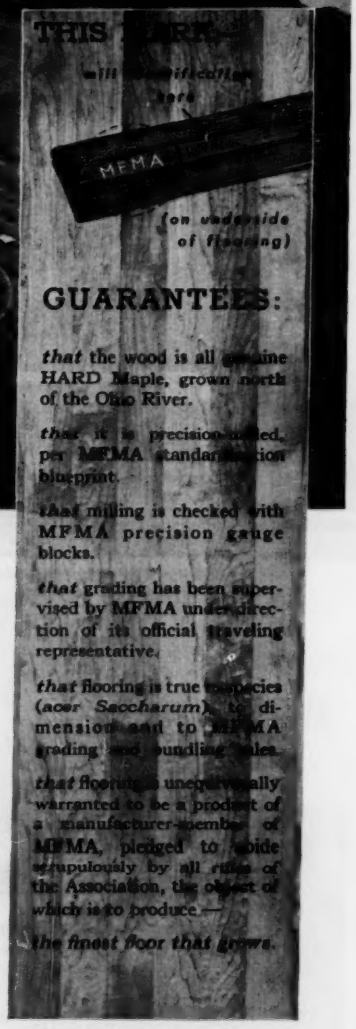
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that flooring is unequivocally warranted to be a product of a manufacturer-member of MFMA, pledged to abide scrupulously by all rules of the Association, the object of which is to produce—
the finest floor that grows.

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—by all means for floors meant for feet!

Physical education and athletic authorities *all* approve floors of Northern Hard Maple. Few of them will accord even reluctant acceptance to any other kind of floor. That's a documented fact.* And the reasons voiced aren't whims, but expert judgment that demands the respect of school building committees.

Certainly, genuine MFMA-millmarked Northern Hard Maple, properly laid, costs a bit more than splintering woods or makeshift synthetics. But it's *enormously* better—more enduring, more resilient, brighter, tighter, warmer, more pleasant to walk on, stand on, run on, jump on, dance on and, if need be, to *fall* on! It's backed by many thousands of dollars spent for research to improve manufacturing, uniformity of design and dimension and *proper kiln drying*. MFMA educational work on waterproofing and trouble-free installation methods is available in free booklets, pamphlets and technical research papers. See Sweet's 13j-MA.

*Ask for Coaches' Survey Summary, available to all Architectural and School people.

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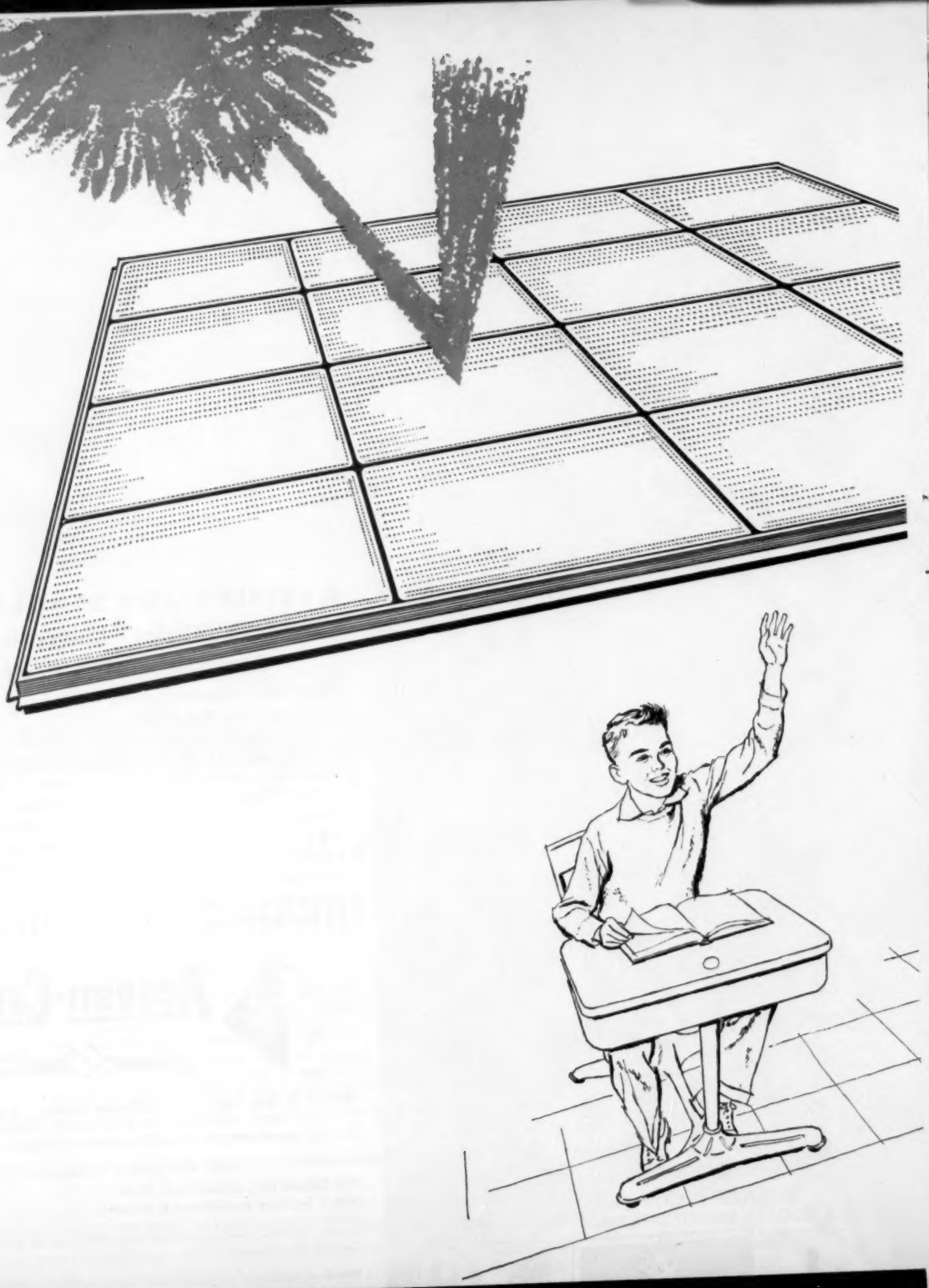
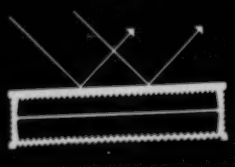
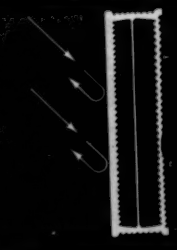




BUILT-IN PRISMS accept cool North light and low-angle winter sun, reflect hot, high-angle spring and summer rays.



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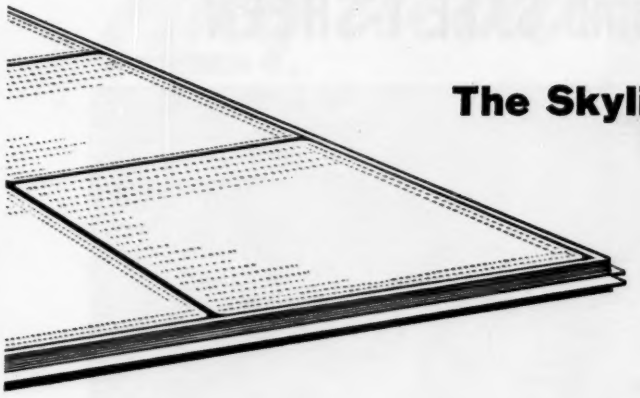

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The substantial price reduction on these improved glass panels has been made possible by the development of a revolutionary new cement.† This new cement is used to form the thin-ribbed grid which supports the light-transmitting glass units.

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Built-in, light-selective prisms in O-I Toplites readily transmit cool North light and low winter sun, reject most of the light and heat from the high, hot summer sun. Result: a building's occupants are insulated from solar heat . . . daylight is more uniformly distributed throughout the year.

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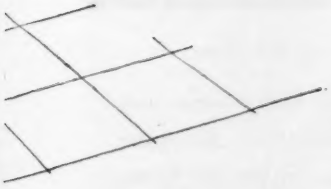

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TWO (O-I) PRODUCTS

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Replace the "slip" cover on your floor with Holcomb SAFE-T-SHEEN

Now, you don't need to sacrifice beautiful floor finish for safety. Get *both* with SAFE-T-SHEEN . . . the anti-slip, no-wax floor finish for composition tile and other floor coverings. It dries to a rich velvety gloss without buffing.

Easy to apply—fast to dry . . . SAFE-T-SHEEN floor finish wears ON where others wear off. It is highly water resistant, completely colorless, completely transparent. Long-lasting SAFE-T-SHEEN cuts maintenance costs—no constant refinishing required. Periodic dry cleaning removes surface dirt and scuff marks—brings up the gloss.

Approved by Underwriter's Laboratories and Rubber Manufacturers' Association. Ask your Holcombman for a demonstration. See *why* SAFE-T-SHEEN is your safest buy for lasting floor beauty.

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CLEANING MATERIALS

See your Holcombman, the "shirt-sleeve" expert on cost-cutting cleaning methods

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Any action is welcome

on Kreolite Gym Floors with the Built-In Cushioned Flex

Typical gym floors are subject to many kinds of activities, some of which can mar and scar ordinary flooring. But, with Kreolite Flexible Strip End-Grain Wood Floors, you have flooring that welcomes *any* kind of action and retains its original beauty.

Durable Kreolite gym floors are also noted for their extra resiliency which makes them kinder to feet and less fatiguing. Besides being easier on the feet, Kreolite floors are also much easier on school budgets because they require less maintenance and last longer.

Write today about new Kreolite installation or replacement floors.

THE
JENNISON-WRIGHT
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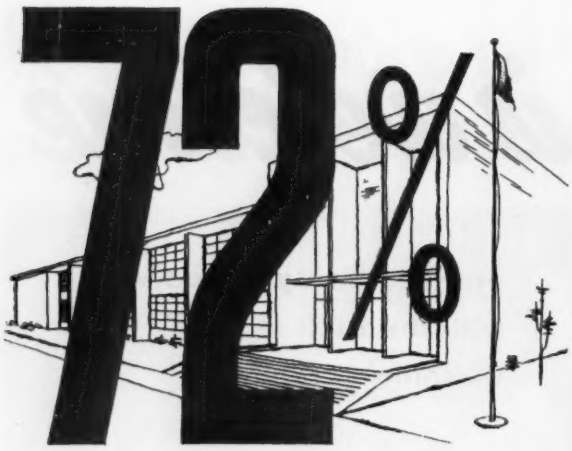

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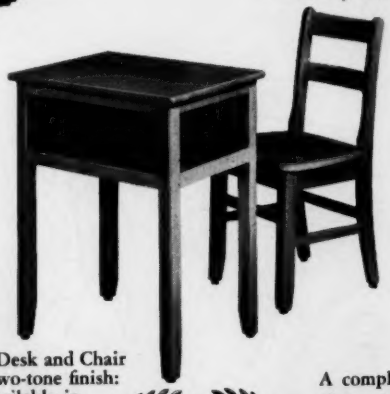

1400-X Desk and Chair Unit. Two-tone finish: Panels available in either blue or coral.

A complete line of classroom seating.

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Architects, Henry D. Dagit & Sons, Philadelphia, Pa., selected tan mottle "8W Series" Natco vitritile to achieve a warm low brightness in the snack bar of Villanova University's Student Union Building.

Note vitritile enclosed recess for automatic folding door at center left. General Contractor was Joseph R. Farrell Inc., Philadelphia. Masonry Contractor was John B. Kelly Inc., also of Philadelphia.

Attractive, Economical, Maintenance-free— Interiors of *NATCO Ceramic Glaze Vitritile*

Clean, fresh interiors of Natco 6T and 8W Series Ceramic Glaze Vitritile have been installed at Villanova University's Student Union Building.

Architects, Henry D. Dagit & Sons, Philadelphia, Pa., took advantage of Natco's wide range of standard colors throughout the building. Sunlight yellow, blue satin shades, white and green mottles and clear glaze were employed at appropriate locations. The result —colorful, permanent interiors.

Natco Ceramic Glaze Vitritile combines beauty with other practical features. It is fire-proof, virtually impervious to physical and chemical damage and requires only soap and water maintenance.

Finally, Natco Ceramic Glaze Vitritile helps reduce construction costs because it is a structural unit with an interior finish that is installed in one operation—*at a single cost.*

Find out all the advantages of building with Natco now! Write for color chart CC-57 and shape catalogs listed at right.

SIZES AND SHAPES

Series	Shape Catalogs	Tile Face Size	Nominal Thickness
"8W"	8W-257	7¾" x 15¾"	2", 4"
"6T"	6T-657	5⅛" x 11¾"	2", 4", 6", 8"
"4D"	4D-1255	5⅛" x 7¾"	2", 4", 6", 8"

NATCO
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Serve "milk-only" pupils separately . . . with a Norris Automatic Milk Vender

Pupils who want only milk slow down your lunchroom line. Solution: Serve your "milk-only" pupils quickly with a Norris Automatic Milk Vender placed away from the regular line. Result: Your entire lunchroom operation is speeded up.

For after-hours milk service, plug the Norris Vender in and refreshing, healthful milk becomes available anywhere, any time.

To save teachers' time, install the Norris Milk Vender and end faculty milk-program bookkeeping. The Norris Vender collects its own money, makes its own change—automatically.

Any child can operate the Norris Vender without error. It's the simplest milk vender built. There's a separate coin channel for each of three drinks. In goes the coin—out comes the carton or bottle automatically. No selector buttons, no dials, no levers. Write today for new FREE folder, including the name of your regular dairy, please.

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Utilizes IDLE Time!

"Burger" Patty Molding Set
For School Lunchrooms

Bring portion-control to your burgers. Produce the patties in spare time and you bring down your food preparation costs. This simple outfit will save you time and money.

Food disher provides even amounts of meat, eliminating waste. Uniform size patties cook evenly and taste better. With this compact, lightweight, portable molding unit, the patties are made, automatically ejected on waxed paper, neatly stacked (with the paper in between) ready to fry. Just lower and raise the handle and the job is done. It's that easy—one can make patties any time.

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Here at DON you will find whatever you need for the efficient preparation and serving of food: compartment trays, dish trucks, mixers, slicers, dishes, tableware, glasses, utensils, linens, for example. With one purchase order you can get all your Equipment, Supplies and Furnishings. On everything, satisfaction is guaranteed or your money back.

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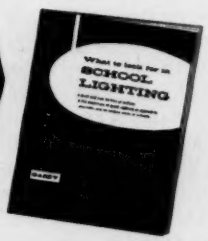
. . . for Every School Lighting Application

Garcy Lighting manufactures a complete line of school lighting fixtures. With the help of Garcy representatives, located in all major cities, you have one source for all types of standard or specially engineered fixtures . . . from major requirements such as classroom and work areas to minor applications such as bulletin boards and trophy case lighting.

Send for this handy reference on school lighting



GARCY LIGHTING
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CHICAGO 47, ILLINOIS

This KARDEX® Bookfold Demonstrator is filled with new ideas on *student recordkeeping*. It gives the forward-looking school administrator a comprehensive range of the most up-to-date and complete methods. It is filled with *examples of every type of record*... the student's cumulative record from kindergarten through high school—complete with such accessory records as anecdotal, census, athletic, program and location.

For example, there is a standard form for general use by any school system. There is the form used by the Diocese of Buffalo which is of particular interest to Catholic schools—as well as examples of student records used by Catholic academies. And so on. No matter what the particular record needs of your school may be, you will find this Demonstrator will show you the actual physical forms best suited to meet those needs. Every record shown is thoroughly practical, having been tried and tested—and is currently in use.

Other Vital Recordkeeping Information. Included in this Demonstrator is a wealth of factual information on protection of vital school records from fire risks. Today, with fire losses in schools constantly mounting, it is imperative to safeguard irreplaceable student records.

Another aspect of school recordkeeping covered by this Demonstrator is quick, easy, economical transcription of your student records. Now REMINGTON RAND TRANSCOPY® makes finished, ready-to-use photocopies of any school record *in less than a minute!* So easy anyone can do it!

The Demonstrator also includes the names of the schools using each type of student record shown.

Write today to Room 1800, for a demonstration. You can't afford to miss all these latest records of student recordkeeping. A Remington Rand School Specialist will contact you and arrange to show you this new, comprehensive Demonstrator. No obligation!

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DIVISION OF SPERRY RAND CORPORATION

Room 1800, 315 Fourth Avenue, New York 10, New York

From AMERICAN BLOWER: proof you can have a

Quality Heating and Ventilating System

. . . within a sound, realistic budget!

Installed along the window sill, Wind-o-line radiant heat protects teacher and students nearby from excessive loss of body heat to cold walls—while the convected heat along the sill warms chilling downdrafts.

NESBITT SYSTEMS SAVE UP TO 20% OVER CONVENTIONAL SYSTEMS. CHECK THESE FIGURES:

IN NEW JERSEY $1.67 sq. ft.
Pennsauken High School, Pennsauken, N.J.

Architect: Faint & D'Anastasio
Engineer: John Knecht
Capacity: 1800 pupils
Gross Area: 188,000 sq. ft.
Total Contract: $2,844,659
Heating and Ventilating: $314, 986

IN OHIO $1.91 sq. ft.
Young Elementary School, Springfield Township, Ohio

Architect: W. B. Huff & Assoc.
Engineer: Paul Fleming
Capacity: 300 pupils
Gross Area: 22,000 sq. ft.
Total Contract: $335,071
Heating and Ventilating: $42,025

IN ILLINOIS $1.41 sq. ft.
Creve Coeur Elementary School, Creve Coeur, Illinois

Architect & Engineer: George Poppo Wearda
Capacity: 256 pupils
Gross Area: 11,800 sq. ft.
Total Contract: $156,124
Heating and Ventilating: $16,664

Compared with the installed costs of some other systems, the Nesbitt Series Hot-Water Wind-o-line system saves you as much as 20% on construction, equipment, and installation costs.

You see, the Nesbitt *Syncretizer* unit ventilator, installed in each classroom, requires only about one third as much hot water. You save by using smaller pipes and pumps. Costly trenches or crawl space, mains, runouts, and pipe insulation are eliminated, because the only supply-and-return piping needed is the Nesbitt Wind-o-line radiation itself.

And no other unit ventilator provides controlled heating, ventilating, and natural cooling as effectively as the Nesbitt *Syncretizer*. When used in combination with Nesbitt Wind-o-line radiation, the result is healthful, productive comfort—free from physical distraction—for every student, whether he sits near the window or at the other side of the room.

Only the comfortable student can maintain maximum learning efficiency. Send, today, for the big book on the value of controlled ventilation, "More Learning per School Dollar." American-Standard,* American Blower Division, Detroit 32, Michigan. In Canada: Canadian Sirocco products, Windsor, Ontario.

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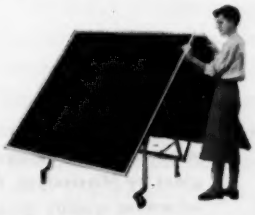
THE PORTABLE SICO **TUCK-AWAY**...MAKES ANY ROOM A GAME ROOM



A Husky Tournament Table—USTTA approved—¾" top—flat green with white court lines—rugged electric arc welded 14 gauge structural steel frame.

That a child can fold... in three seconds—No catches, latches or locks. Tops adjustable to allow safe handling by children. Exclusive Sico "floating fold" carries table weight. Works quickly, smoothly—without slamming or scraping floors.

and roll away to store in 18" wide area . . . Stores in floor area only 18" x 60"—can be rolled anywhere on 3 in. rubber casters. Leaves playing area open to many other uses—yet can be set up again in seconds.

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New Newark Elementary School, Newark, California

Silva Intermediate School, Newark, California

Safer Ceilings of Sunlight

Architect: Falk & Booth,
San Francisco, California

Mr. Jack McGregor, Sup't of Schools,
Newark, California

Coolite Wire Glass Skylight Installations Give Better Daylighting Plus Protection

Classrooms in both Silva Intermediate and New Newark Elementary Schools, Newark, California, are bright as all outdoors. Coolite Wire Glass skylights form ceilings of sunlight, flood rooms with copious quantities of softly tinted, glare-free daylight, diffused for better illumination. Students see better, feel better, work better. And these high levels of lighting are achieved without unduly increasing temperatures, for Coolite, the heat absorbing and glare reducing glass, absorbs up to 50% of unwanted solar heat . . . helps keep interiors more comfortable.

These efficient wire glass skylights not only make seeing tasks easier to help protect young eyes; they also help guard students from fire or breakage. Mississippi Wire Glass (Approved Fire Retardant No. 32) tends to bottle up small fires before they can roar into holocausts. Mississippi Wire Glass cannot burn and it will not shatter. When broken, it hangs together in its wire web . . . gives pupils more light plus positive protection.

When you build or remodel your school buildings, specify glass by Mississippi. Available wherever quality glass is sold in a wide variety of patterns and surface finishes to meet any daylighting needs, within any school budget.

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The choice of toilet compartments reflects the good judgment of architect and builder, as well as the owner's concern for the opinion of building occupants. When Sanymetal compartments are specified, there is no question that the installation will be attractive, that it will last the life of the building, and that maintenance costs will be at a minimum. Whether you are looking for design and beauty, or engineering and quality construction for savings, Sanymetal is fairest to all.

See Sweet's, or write for Sanymetal Catalog 95
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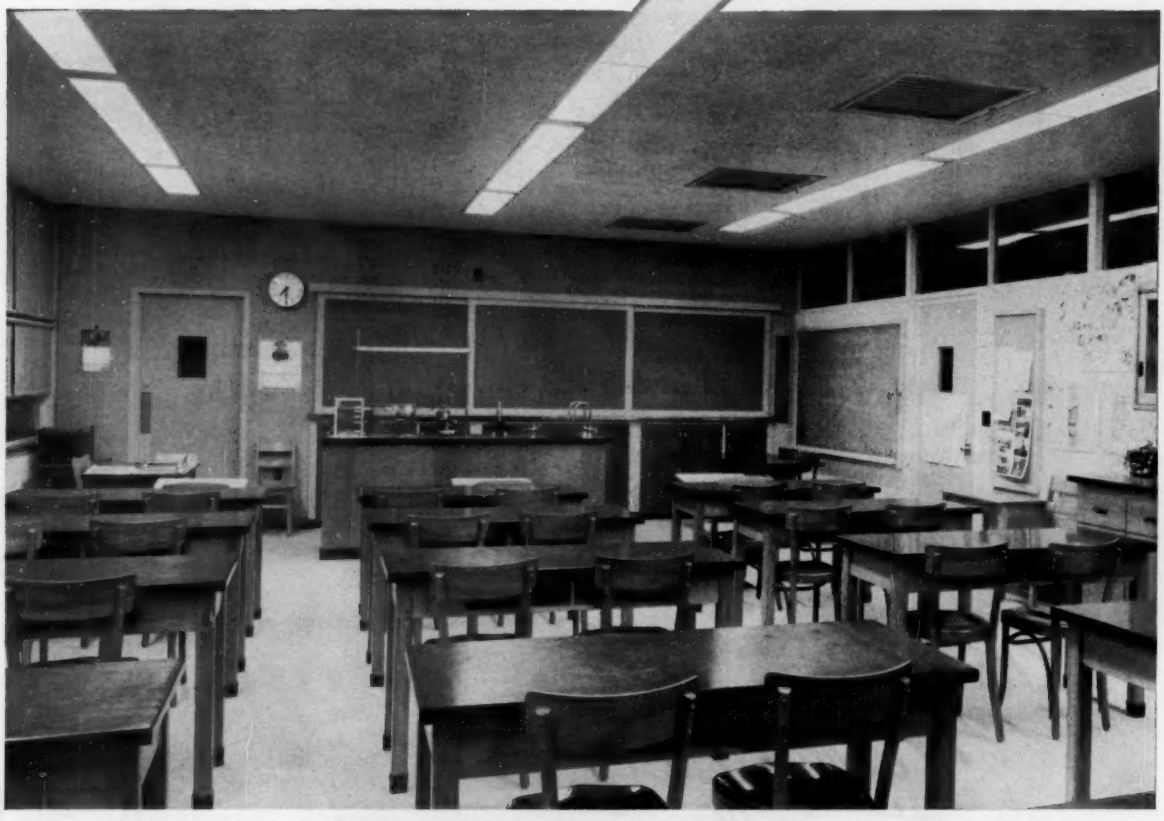
No experimenting with lighting in this lab . . . .



Continuous rows of Day-Brite Recessed Troffers on 8-foot centers furnish 55 footcandles in this combination laboratory and lecture room in the Hope Mills High School, Fayetteville, N. C., ARTHUR C. JENKINS, JR., *Architect;* WATSON & HART, *Electrical Engineer;* HOWARD TALLEY ELECTRIC CO., *Electrical Contractor.*

Point-by-Point Comparison Proved Day-Brite Best!

The best doesn't *cost* . . . it *pays!* And that's especially true of lighting.

Skeptical? Here's what happened in the case of the high school shown above.

A side-by-side fixture comparison showed that installation economies made possible by exclusive Day-Brite design and construction features put Day-Brite lighting within budget limitations. *Total building cost was only $9.60 per square foot!*

Get the whole story. Call your Day-Brite representative (listed in the Yellow Pages) for the *facts* and the *fixtures.*

DECIDEDLY BETTER
DAY-BRITE
LIGHTING FIXTURES

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NATION'S LARGEST MANUFACTURER OF COMMERCIAL AND INDUSTRIAL LIGHTING EQUIPMENT

THE NATION'S SCHOOLS
AUGUST 1958

Looking Forward

A Summons to Immediate Action

WHAT are you doing with the special report of the Rockefeller Brothers Funds, Inc., on "The Pursuit of Excellence: Education and the Future of America"? It's a wonderful document* for honest public relations!

This two-year study gives education a *priority* that the layman cannot ignore. No vested interests of the teaching profession prepared it; no school commercial interests financed it.

Voicing the conclusions of leading citizens in this country, it looks objectively and impartially at the plight of public education and states, irrevocably: "The nation's need for *good* education is *immediate;* and good education is expensive. That is a fact which the American people never have been quite prepared to face. . . . At stake is nothing less than our national greatness and our aspirations for the dignity of the individual. . . ."

The full report (49 printed pages) spells out what it terms drastic or even revolutionary changes that must take place, and soon.

"Our schools are overcrowded, understaffed and ill equipped," the panel said. ". . . Pressures will become more severe in the years ahead. . . . Our schools will need greatly increased public support and attention, and much more money. But they also need something besides money: an unsparing reexamination of current practices, patterns of organization, and objectives. . . .

"We must recognize that in the past 75 years we have heaped upon our educators one of the most heroic assignments a society could have invented. We have taken into the school system a greater proportion of our youngsters and we have kept more of them in the system longer than any other nation. . . . We have pressed our educators to include in the curriculum an incredible variety of subjects, to take over more and more of the functions of the home, and to accept a sense of responsibility for every psychic or civic crisis involving individuals below the age of consent.

"That our educators did not founder completely under these chaotic pressures is impressive. That they may be credited with heroic achievements in creating a system of universal education is a simple fact. And that their failures are in some measure failures of the American people is undeniable."

What solutions does the survey offer? Several. First of all, it asserts that "our national leaders will have to grasp the true scope of the task. Perhaps the greatest problem facing American education is the widely held view that all we require are a few more teachers, a few more buildings, and a little more money.

"Such an approach will be disastrous. . . . An educational system grudgingly and tardily patched to meet the needs of the moment will be perpetually out of date. We must build for the future in education as daringly and aggressively as we have built other aspects of our national life in the past."

The report is the fourth to be made public in the series of panel studies originally set in motion by Nelson Rockefeller. Identified as Special Studies Project Report V, it represents the research and the deliberations of scores of experts and opinion leaders. The final draft was submitted by a panel of 15 leading citizens, headed by John W. Gardner, president of the Carnegie Corporation.

Perhaps you have already done so, but if not, may we suggest that you obtain a copy of the report for every member of your board. Have you made it available to your teachers and urged them to discuss it? Have you suggested to P.T.A. officials and other education-minded groups that it be presented and discussed?

The report calls for decisions and choices. It affirms the prediction of other economists that public school costs will double by 1970. It offers only two alternatives for meeting the situation *financially*. Either there must be a "thorough, painful, politically courageous overhaul of state and local tax systems," or the federal government will have to help pay for the kind of educational system that will "identify, nurture and wisely use" every individual's talent.

But more money isn't the total solution. The panel challenges the teaching profession to acquire a better understanding of the "values" for which our public schools are organized, and to inspire children with an appreciation of those values.

"Education," concludes the report, "is not just a mechanical process for communication to the young of certain skills and information. It springs from our most deeply rooted convictions. And if it is to have vitality, both teachers and students must be infused with the values which have shaped the system. . . . We must assume that education is a process that should be infused with meaning and purpose; that everyone will have deeply held beliefs; that every young American will wish to serve the values which have nurtured him and made possible his education and his freedom as an individual."

The Editor

*Be sure that you have a complete copy. Don't depend upon excerpts from newspapers. The report may be obtained in booklet form from Doubleday & Company, Inc., Garden City, N. Y., at a list price of 75 cents per copy. Or a summary may be found in the *New York Times* for June 23, page 16.

Whose Man Is the Superintendent?

He's the board's man, the teachers' man, the pupils' man, the community's man, and God's man, says Rochester's genial sage

JAMES M. SPINNING

IN MY weakest moments I have daydreamed about how nice it would be to operate without a board of education breathing down my neck.

Last week in riffling through some old calendar pads I found that one board member had been in my office for from 10 minutes to three hours on an average of three days out of five for a period of eight years. How did I ever get any work done? Suppose every board member had hung up an equal record!

But my dream of no board at all was just plain childish. A local lay board is of the essence of our democratic system. Even if it were legal and feasible it would be just as senseless to set up a superintendent as an independent operator as for a board to attempt to function without a chief executive officer; or, having one, to operate *over* or *around* him. As in so many areas of life, the way *out* has to be the way *through*. We just must plan on cordial coexistence.

USING MOUSETRAP?

But, asks the new and skeptical board member (who has just been elected on the usual one-plank platform of "*I* will not be a rubber-stamp for the superintendent"), "How can a board be sure it isn't being mousetrapped by the superintendent?"

Passing over the easy reply that only mice can be mousetrapped, let me suggest criteria for assessing executive competence and performance.

My prejudices stand firm that a superintendent should himself have the following:

1. **The basic elements of a liberal education achieved with some degree of distinction.** There should be more than an aura of scholarship about him. There is no substitute for a rounded education designed to give a rounded view of life. For either teacher or administrator I favor the type of education which, instead of telling him which wrench or screw driver or table fork to use for every conceivable occasion, tries to produce in him the fundamental attitudes and understandings that will enable him to figure out which tool to use, *and which tools to invent*, for every occasion.

At the same time I am distressed by the radical gents who talk of *pure* administration and *pure* administrative skills, as if these could exist in a vacuum. Apparently they mean that if a man has these skills by dint of book-larnin' or natural talent he can equally well administer an airplane factory, a hospital, a supermarket, or a school system.

2. **Among his musts a superintendent should have competence and good seasoning experience as a teacher.** He ought to be able to understand what does, what should, and what could go on in a classroom. Somehow I believe that a man handles things better when he knows what he's talking about. A superintendent should be able to command the respect of his teachers in the general field of their competencies.

3. **Out of his knowledge of the teaching job and process he ought to be able to inspire and lead his staff,** win its support, foster its inservice training and growth, take pride in it, make himself able to brag like crazy, but honestly, about his teachers.

He will realize that in the multifarious range of school affairs he cannot know and judge everything at first hand. So he will welcome the contributions of those who work with him, be in no wise jealous of their attainments, but grateful for them. He will be a good consulter, will know how, when and whom to consult. And he will lead his directors and principals into this way of working.

In whatever capacity they serve he will think of and refer to all members of his staff as associates, never as subordinates. He will prize them as individuals and as friends, be concerned for their families and their welfare, be a good parish worker.

He will be capable of taking final responsibility for his own acts, ready to own up when he is wrong, but as chief trouble shooter for the system he will also be ready to take responsibility for collective errors, for not having prevented the goofs of his associates. In short, he will not be a buck-passer.

4. **A good superintendent will care profoundly about people.** Most of his life will be spent with them. It is

From a paper presented at a School Boards Institute participated in by board members of nine New York counties in the Rochester area.

James M. Spinning, editorial consultant for The NATION'S SCHOOLS *since 1935, directs some well chosen words to superintendents and school board members. Recently honored by the A.A.S.A. for distinguished service in school administration, Mr. Spinning served as superintendent at Rochester, N.Y., for nearly 21 years. The A.A.S.A. award cited him for being "a source of inspiration to young administrators and a spur to the elders."*

with them and through them that he accomplishes results. It is for them that the schools exist. Particularly he will care about boys and girls, be able to see them both for what they are and for what they may become. While he should see them as individuals he should see them, too, in relation to their families, and to community, national and world citizenship. He should know their motivations and their problems. His first approach to youngsters as to everybody else should be affirmative rather than negative.

5. **The superintendent, like his board members, should be community-minded, sensitive to needs and attitudes, able and ready to lead in community enterprises.** But, rather than spread himself as thin as floor polish on nonschool endeavors, he will encourage his staff to participate in these projects and to exercise leadership in them.

6. **He will be articulate—not necessarily eloquent, but clear.** He will be quick with the right word, slow with the wrong one. He will be skilled in educational jargon only to interpret it—never to use it. (Pardon me while I remark that most educational literature is anything but literature. It cries out for clarity and a shot of living, vibrant technicolor.)

While the superintendent will respect confidences and confidential information, he will be utterly frank about those things the public has a right to know about its schools—and that's almost everything. He should know enough about the jobs of reporters and editors to win their respect and to establish good press relations for the schools. By opening up interesting leads to school news he will, one would hope, convince them that occasional educational hassles are far less than the whole school story.

7. **The superintendent will have convictions and the courage of them.** But he will also be a paragon of patience and of consideration for others. He will work like a horse—and he will be available. He will get things done with all deliberate speed. He will spend more time in improving the school program than in justifying the status quo. He will never gripe, except to his wife. And if she pops off in public about school matters he will divorce her—also with all deliberate speed.

8. **The superintendent should know the economic facts of life, understand a balance sheet, financial as well as educational.** He should never try to make two and two look like three or five—unless he can prove it. He should know where within his staff and outside it to get sound expert judgment for his board in the technical aspects of finance, buildings and purchase.

This list is only partial, and some of these qualifications may be dispensable, but the general pattern is not.

I don't believe in tenure for a superintendent. A statutory term of office or contract long enough to give him a chance to meet reasonable expectation, yes. But in the long view the community must have the power through its proper agents to break an impasse, enable the schools to go forward efficiently and with dignity. Otherwise democracy is defeated.

The salary of the superintendent should be high enough to enable him to face the risks, make up for the loss of tenure he incurred when he signed on. He must be prepared to live dangerously, not securely. Otherwise, *he* is the mouse in the trap.

PRIME MINISTER OF PARTY

I look on the superintendent as a sort of prime minister—not that he owes his position to his leadership of a party, God forbid, but that he continues in office only so long as he can command (and deserve) the confidence of the legislative body, and when he can't he resigns. At least, that's the way I think it should be. (You understand, I am sure, that in my parallel I am thinking more of the British governmental situation than of the French.)

Under this concept the superintendent has the duty as well as the privilege of recommending policy to the board and of arguing for it. He may win and have his recommendations accepted, or lose and accept the decision gracefully. This theory in no way impairs the right and duty of the board to initiate its own legislation. In doing so it would allow, nay request, the superintendent to be heard, and then, like Parliament, in its wisdom decide. If the superintendent is unable to go along with essential board policy or suffers repeated defeat on his own recommendations, only one course is left open to him—through the door marked EXIT.

This won't happen more than once in a purple moon if there can be sound distinction between policy forming and administration. When breakdowns occur it is usually through failure to observe this fundamental distinction.

First, let's look at the problem of personnel. New York State law gives the superintendent the duty and right of recommendation and the board the duty and right of approval. It isn't so clear as to what happens when the superintendent's recommendations are rejected. My answer is clear, though. If rejection comes in a case that the superintendent regards as top critical or if he encounters repeated rejection, he resigns.

In times long past I have been on the verge. On the day I took office I wrote out my resignation complete except for the date and put it in the nearest drawer of my desk. Three times I had it out on the table. I never used it or, note this, threatened to use it—it would probably have been snapped up. But I was *prepared* to use it.

Each time a matter of personnel was at stake. Having studied candidates for appointment or promotion as carefully as I knew how, having consulted those I knew to be honest and best equipped to judge, having canvassed frankly and fully with the board both the strengths and the weaknesses of candidates, having scrupulously supplied the members with every bit of evidence available to me, having taken under advisement and investigation any contrary evidence or view that board members might have, and having agonized over every case to my full agony limit, I felt justified in following the provision of the law that seemed to require that the final recommendation should indeed be my own. Much as I wanted to avoid mistakes in recommendation, the law gave me even that right. I'll admit I pulled some boners.

Occasionally I had to remind a board member that while I was eager to have suggestions from board members, I had no right to cheat them of my honest, independent recommendation. And, in accordance with the prime minister theory, I tried to tell him that the board members were not really voting for a particular candidate but for or against my recommendation—and me.

WHOSE MAN?

Is the superintendent, then, the board's man? Is he the teachers' man? Is he the pupils' man? Is he the community's man?

Emphatically, the superintendent is the *board's* man. But he is not truly the board's man if he is not also the community's man, and the pupils' man, and the teachers' man. And in a real sense he must also be God's man. I hope he won't forget that many people who differ with him are also God's men. I hope he will remember that lovely line from Christopher Fry's play, "The Lady's Not for Burning," "A halo is just one more thing to keep clean." #

In another article next month, Mr. Spinning will discuss the professional relations of the superintendent to the board of education.

Let's Lengthen the School Year

CALVIN GRIEDER, *Professor of School Administration, University of Colorado*

FOR many years there has been a trend in the direction of lengthening the school year, while at the same time some slight reduction in the school day has occurred. Currently there is widespread interest in promoting higher academic standards, especially at the secondary school level. Many teachers believe that more time is needed for the proper teaching of their subjects.

At its 1958 regional conventions, the American Association of School Administrators adopted a resolution urging an extended school year for all pupils. "There is now more to teach and learn than can be accomplished with high quality in the present time allotment . . . that cannot be accomplished in the traditional nine months of schooling."

NINE MONTHS NOT ENOUGH

The nine-month school year (36 weeks) and five and a half to six hour school day, widely adopted in the early years of this century, hardly seem to fill the bill now. In addition to the need for more time for the "regular" work of the school—the curricular work—an extensive program of school activities in junior and senior high schools imposes a further need for more time to be spent by students under school auspices. Time for much of the latter is now afforded by scheduling activities for after school and in evening hours.

Data on length of school year are not plentiful, but from what are available it appears that many of the large city districts provide for 185 to 190 net school days, *i.e.* actual teaching days. Some run fewer days; a few exceed 190. About half the states require at least 180 days. Only one state (New York) specifies a minimum of 190 days; the rest require fewer than 180. Likewise, in about half the states the legal minimum is usually exceeded. For the nation as a whole, the school year can generally be regarded as running from 175 to 180 days.

So far as I can ascertain, no school system in the country has a school year of 200 teaching days, although probably a very few do.

FOUR-QUARTER PLAN IMPRACTICAL

In the last three or four years considerable popular interest has been expressed in greater utilization of school plants. The so-called four-quarter year with each pupil attending three quarters is the most frequently proposed scheme for achieving greater plant utilization. Forty or more numerous and formidable administrative problems inherent in the plan, plus the fact that the actual number of school days for each pupil would be slightly reduced below the customary 175 to 180 days, make the adoption of the four-quarter plan impractical and unwise.

No city school system that has adopted this plan has retained it, and no city school system now uses it. It is likely that in the long run there would be no financial advantage to be derived from the four-quarter plan, although that is the chief reason, if indeed not the only reason, why the plan is advocated.

Another important consideration in connection with the school year is the employment period of teaching personnel. (This applies to some extent to noncertificated personnel as well.) One of the recognized drawbacks of teaching as a profession (where the nine-month year prevails) is the fact that teachers are unemployed for one-fourth of each year. Few informed persons would argue that teachers should work in the classroom 50 weeks a year, but one recent proposal (which was made by Prof. Robert Bush of Stanford University in Denver, April 1958) calls for an 11 month (presumably 44 to 46 weeks) school year, with a seven-hour school day.

A few school systems (*e.g.* Glencoe, Ill.) follow a plan affording employment for 44 weeks a year for two out of each three years, 36 weeks the other years. This plan provides for 36 weeks of teaching and summer employment for eight weeks in either school or community enterprises. It would probably not be adaptable to a large city school system.

Taking all the ideas expressed above into account, I propose that a 200 day school year be adopted with a school day of five hours for the elementary grades (K-6), and seven hours for junior and senior high schools (Grades 7-12). The proposal, for which suggested calendars are given herewith, provides for 200 days of pupil instruction, exclusive of holidays and days allowed for attendance at conventions or institutes, preschool conferences, and the like.

A 200 day school year would provide (a) more time for instruction, (b) greater utilization of plant, and (c) a longer term of employment for teachers and some other classes of personnel. While there would be little increase in the total time spent by elementary school pupils in school (from 13 to 14 per cent), a substantial increase (about 35 per cent) would be effected in secondary schools by virtue of the seven-hour day proposed for the latter, as compared with the five-hour day (as at present) for the former.

If we use for comparison a fairly typical school year of 176 days of instruction, in elementary schools where the school day runs from 9 a.m. to 3:15 p.m., with one and one-fourth hour for noon intermission, there is a net school day of five hours, and a total for the year of 880 hours. It is proposed that 200 days of instruction be provided, with no change in the school day, for a total of 1000 hours.

SEVEN HOURS DAILY

In junior and senior high schools operating for 176 days, from 9 a.m. to 3:30 p.m. with 40 minutes for lunch, there would be a net school day of 5 hours 50 minutes, and a total of 1027 hours for the year. These figures do not include time outside the normal school day (after school and evening hours) during which various school activities are frequently carried on. For these schools it is proposed that 200 days be scheduled, with a seven-hour day (*e.g.* 8:30 to 4:30 with an hour noon intermission), for a total of 1400 hours per year.

As part of this proposal it is suggested that ALL school activities be scheduled during the regular school day, including athletic practice, play rehearsals, and music groups except for Friday evening, perhaps Saturday.

Protests from some groups against lack of time will inevitably arise, but one consideration in my mind is the reduction of overemphasis on activities and more *emphasis on the curricular program.* It is recommended that when the school day ends, for example at 4:30 p.m., the school close, and that no after-school or evening activities or events be scheduled for Monday, Tuesday, Wednesday or Thursday. This would make the assignment of homework in reasonable amounts (say two hours a day on the average)

more defensible, and the expectation of teachers that homework would be completed more justified.

Two plans for the school year calendar are submitted herewith. One plan is proposed in terms of two semesters, 100 days each. This would probably be easier to move to than the other plan. The second plan, perhaps psychologically more sound because of its spaced vacation periods, calls for four terms of approximately 50 school days each. For 1958-59, two calendars along these lines are given.

My own preference, as between these two plans, is for the four-term year, primarily on the grounds that the spaced vacations would be preferable for pupils and teachers. Leaves of absence for teachers could also probably be arranged more easily for quarters than for semesters, if longer periods off duty were needed for various purposes.

FINANCES THE MAJOR PROBLEM

A 200 day school year, under either of the foregoing plans, would increase the employment period of teachers and others employed on a school-year basis by approximately 20 school days, or 11.1 per cent. On the surface, this might be taken to mean that every employe so affected should be given an exactly equivalent increase in annual salary. This assumes that the present rate of pay is exactly what it should be, although it is common knowledge that requests for increased pay are a matter of continuous concern to the board of education, the administration, the teachers, and other employes alike.

It occurs to me that while some 20 additional days of school would certainly call for some increases in pay, such increases need not be scaled exactly to the change in the school year. Rather a new salary and pay scale should be worked out to the mutual satisfaction, so far as possible, of all parties, and with regard for the district's ability to pay. It is tentatively suggested that something in the order of 10 per cent would be appropriate.

REMOVE STATE LIMITATIONS

One other important financial consideration is the limitation imposed by state aid plans in some states in the distribution of state support. Any limitation on the number of days, such as 170, 172 or 180, for which state aid would be allowed should be removed, so that school districts that wish to offer more than the legal minimum now recognized will not be penalized.

Other financial problems, including transportation costs, utilities and the like, appear to be of minor importance compared with personnel costs.

TWO PROPOSALS FOR LONGER SCHOOL YEAR

TWO SEMESTERS, 100 SCHOOL DAYS EACH (EXCLUSIVE OF CONVENTIONS AND HOLIDAYS)

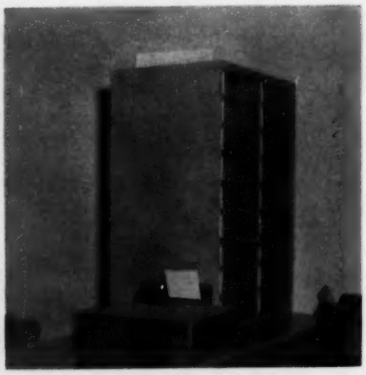
Fall Semester	Aug. 18, 1958, to Jan. 23, 1959: 100 days. (Labor Day, 2 days for conventions, 2 days for Thanksgiving, and 2 weeks for Christmas vacation are not included in figuring the number of days taught.)
Spring Semester	Jan. 27, 1959, to June 23, 1959: 100 days. (One-week vacation at Easter, which falls on March 29, and one day for Memorial Day, which falls on Saturday, are not included in figuring the number of days taught.) Summer vacation under this plan would extend from June 24 to about August 17, for about 8 weeks.

FOUR TERMS, 50 SCHOOL DAYS EACH (EXCLUSIVE OF CONVENTIONS AND HOLIDAYS)

Fall Term	Monday, Aug. 18, 1958, to Friday, Oct. 31, 1958: 52 school days. (One day for Labor Day and two days for teachers conventions are not included in figuring the number of days taught.) One-week vacation would follow this term.
Winter Term	Monday, Nov. 10, 1958, to Friday, Jan. 30, 1959: 50 school days. (Two days' holiday for Thanksgiving, and Christmas vacation beginning Wednesday, December 24, and extending for eight school days are not included in figuring the number of days taught.) One-week vacation would follow this term.
Spring Term	Monday, Feb. 9, 1959, to Friday, April 17, 1959: 49 days. (One day, Good Friday, March 27, allowed for vacation not included in figuring the number of days taught.) One-week vacation would follow this term.
Summer Term	Monday, April 27, 1959, to Friday, July 3, 1959: 49 days. (May 29 is allowed as a holiday for Memorial Day, which falls on Saturday in 1959. This is not counted in figuring the number of days taught. If Friday, July 3, were deemed a holiday because July 4 falls on Saturday in 1959, this term would end Thursday, July 2, making 48 school days and a school year of 199 instead of 200 days taught.) Slight variations like this would occur in some years. Following the end of the summer term, a summer vacation period of approximately seven weeks would occur.

Under either of the two plans for a 200 day school year no additional major problems appear. Summer programs of study could still be operated for five to six weeks. Maintenance of plant would suffer from no interference. Summer employment of teachers and pupils would be curtailed to some degree, since the summer break would be seven instead of 11 or 12 weeks.

My view is that the main business of teachers is teaching, and the main business of children and youth, in addition to simply growing up (in which the schools presumably help) is going to school. The personal convenience of neither pupils nor teachers should be given much weight in making decisions on the school year and the school day. #



DESIGNED BY STAFF

A worktable with a top designed by a teacher in the San Angelo schools is shown in the picture in the upper left corner. In the upper right corner is a table that serves hard-of-hearing children. It has earphones for eight; teacher sits in center. Directly below is another worktable. Seats swing under the table when not being used.

In the center group of pictures at left, the two in the top row show a chart rack (left) and a cabinet for teachers' mail and messages. The chart rack has a storage compartment in the back for charts and flash cards; the large shelf in the bottom was built to hold the outsize books.

Pupils at left are working at an arithmetic table shown in greater detail in the photograph at the bottom of the page. Pupils fit the pieces into place as in a jigsaw puzzle in order to learn their numbers. This table was designed by a San Angelo teacher.

Staff Designs School-Built Teaching Aids

THE school district of San Angelo, Tex., makes many of its own teaching aids and much of its classroom furniture.

Significant as the dollar savings are, San Angelo's superintendent of schools, G. B. Wadzeck, believes that even more important is the advantage of giving each teacher exactly what he wants and can make best educational use of.

Multipurpose teaching and activity areas are essential for the San Angelo curriculum, which is based on ability grouping. For part of the subjects taught, the children are separated into slow, average and advanced learners. This separation is hard to achieve in an old school building, even with remodeling, but it is a requirement in all new schools built in the district.

AIDS BUILT IN QUANTITY

Custom-built teaching aids produced by the district's auxiliary services department are the heart of San Angelo's successful attempt to create a flexible, moneysaving school system. Costs are kept down by cutting a number of pieces at once and using them as needed for items of furniture in steady demand. Fir plywood, the most extensively used material, is consumed at the rate of about 34,000 square feet a year. Most of it is regular interior grades commonly used for cabinetwork, though the district has been experimenting recently with other products such as resin overlaid fir plywood.

In the warehouse and shop building, two men on the 13 man auxiliary services staff work full time on carpentry and cabinetwork for all schools in the district. Virtually nothing is wasted. Sawdust is used for fertilizer or combined with wax for floor sweep. Scraps of lumber and plywood are used for blocks and building logs. Teachers of lower grades drop in frequently, look over the scrap pile, pick out what they can use, and ask the carpenters to sand, varnish or otherwise finish the blocks.

Almost every piece of furniture has a different design history. Many are designed by Superintendent Wadzeck, perhaps working with an architect. Or teachers may see items in other classrooms and adapt them to their own needs. Teachers are welcome at any time to take rough drawings and specifications to the cabinet shop for pieces of furniture they want. The policy is to build one of anything that is asked for; if it works out, more may be built. The design-it-yourself program has been so enthusiastically received that more than 150 tables are currently on order, most of them designed by teachers.

SCIENCE TABLES UNIQUE

One of the most useful and well planned teaching aids in San Angelo's schools is a set of science tables, introduced last year. A team of teachers worked four months to plan, design and build the tables. Six sets were built in the school shops, each one at a cost of $138.34. The sets are rotated among six of the schools in the system, each of which keeps a set for six weeks.

Each table is devoted to a different subject: nature, earth, machines, electricity and magnetism, the universe, and heat, light and sound. Teachers and principals in individual schools schedule their classes' use of the sets during the six-week period they have them. Science teaching starts in the first grade in San Angelo.

In each set are three units: a portable laboratory table, 5 feet long, and two smaller carts for reference books and teaching materials, one of which is placed at either end. All three carts are on casters. The large table has storage space accessible to the teacher from the back. Electrical experiments are made possible by an outlet in the table, with wire stored within a special compartment to plug into the outlet in the room. The laboratory table has a rubberized acid-resistant top. Materials and equipment for each set come to about $200 a year. The carts are built of plywood, mostly ¾ inch.

Another table, designed by a first grade teacher in the San Jacinto School, Mrs. Cleo Louise Hester, is equipped with everything needed to teach first graders their arithmetic. It is a rectangular table large enough for eight or 10 students to work at. Almost all the table's surface is cut into jigsaw puzzle-like pieces, and these can be arranged and set in place by the pupils to help them learn numbers and simple calculations. Some of the pieces are like oversized dominoes, to teach the children matching numbers. This table is made of fir plywood with a birch plywood top.

OTHER MOVABLE TEACHING AIDS

Another item in use in many elementary classrooms is a chart rack. It has a big drawer in the bottom for outsize books, with a vertical storage compartment behind the chart display board to hold large charts. The back can also be used as tackboard. Flash cards go on the racks on the front. When chart work is not on the program, the rack can be rolled off into a corner.

A widely used movable teaching aid is a study desk with storage and work space available from either side. A let-down door swings down on each side, so that two groups of students can work at the desk at once. Some of these desks have pull-out metal trays for clay, crayons and other messy materials. Each of these cabinets (44 inches long by 2 feet deep by 32 inches high) cost the school district about $85 to make, evenly divided between material and labor costs.

Large study tables are seen in most classrooms. One model seats eight students, and has a round wood top and a wood seat fastened to each of its eight metal legs. These seats swing in under the table when not in use.

Other tables are sectional, so that when broken up they can provide a study area for one or two students separated from the group. Each individual unit is 2 by 4 feet; some are rounded on two corners so that when the units are put together an oval-shaped table results. A shelf 3½ inches below the table top provides storage space for the students.

Still other items in San Angelo's furniture "line" include: a Lazy Susan study table with a raised circular section that revolves in the center of a 10 sided table; movable coat storage cabinets, which are gradually replacing closets; rolling book cases; open storage cabinets with tackboard or pegboard on the ends; a rolling teacher's bookmobile rack, with shelves slanting inward to keep books more securely in place, and a variety of filing and storage cabinets for administrative use.

OTHER SAVINGS

San Angelo's auxiliary services department, under D. N. Peterson, performs a number of other moneysaving functions in addition to cabinetwork and carpentry.

Its headquarters building (formerly a wool warehouse) serves also as warehouse for all school supplies and provisions, many of which are bought in carload lots or from government surplus. The building's facilities include a fully equipped metalworking and machine repair shop and glass cutting equipment. An open-air area adjacent to it is used to make all playground equipment for the entire school district. #

Teachers Celebrate the Fourth

In Cleveland, N.E.A. delegates decide to enter politics, as pressure group or, if they choose, as candidates

MILDRED WHITCOMB

AN UNSCHEDULED display of Fourth of July fireworks brought to a dramatic close the 96th annual convention of the National Education Association in Cleveland, June 29 to July 4.

A lighted sparkler tossed on the floor by the 150 member New York State delegation—that the N.E.A. conduct a research study of integration progress and practices in public schools during the year, reporting back at the next convention—ignited a shallowly buried cache of explosives.

The first rocket that went up was fired by Georgia, which demanded that the general assembly adjourn. This motion was overwhelmingly defeated, but as the debate had gone on Southern delegates had been stealing out of the hall. The Georgia delegate demanded that the chairman determine whether a quorum was present. As state chairmen checked their delegations, the Southern exodus quickened. When the count was complete, the assembly was 467 votes short of a quorum, so the meeting had to be adjourned.

Later, at the evening session, peace was restored. New York State withdrew the motion on condition that the N.E.A. board be given the motion for study. President Lyman Ginger agreed that the board will consider the matter at its fall meeting.

Earlier on the national holiday the national dilemma had been skirted over lightly, as delegates approved 18 resolutions with the usual "fair play" wording on integration.

Pessimistic over the prospects of federal aid at the start of the convention, by Fourth of July Eve the teachers were plotting political pressure of unprecedented scope.

The N.E.A. opened a briefing office at the convention to spell out to the 7000 teachers present just what they can do when they get home to pressure federal aid legislation through the present session of Congress. (In addition to the 7000 teachers present, some 4000 other persons attended.)

A resolution on federal support of education, drawn up earlier and voted on Independence Day, did not mention this grass-roots rally, which is designed to put the finger of more than a million teachers on congressional candidates by November.

Another resolution made clear the teacher's right to discuss political issues, campaign for candidates, and run for public office.

The N.E.A. redrafted its platform at this convention, the most sweeping change being that the recommended class size for basic learnings is now set at 25 elementary school children instead of the old 30 to 35. While realizing that this would intensify the teacher shortage, the delegates set it as a goal, progress toward it being counted of supreme importance.

DEMANDS OF CLASSROOM TEACHERS

The classroom teachers voted vigorously for resolutions demanding: (1) quiet lunch and rest periods; (2) no nonsense about the four-quarter school year; (3) no merit rating of the subjective type they hear tell of; (4) written policies on discipline cooperatively arrived at by teachers, board, parents and children; (5) some secretarial and clerical help (but that doesn't mean teacher aides). They also want the N.E.A. Research Division to conduct teacher opinion polls.

As in all teachers meetings, the administrators and campus sages did most of the talking, although didn't always get the last word. Or if one of them did, in the corridor the teachers often murmured against him.

To sum up the six days, the gist seems to be: Communication between schools and public must be improved, if the American educational system is to have the moral and financial support needed to bolster its program for all children up to their God-given capacity.

The critics were present, although not in the flesh. They haunted every general session and discussion group.

C. C. Trillingham, president of the A.A.S.A., was among the first to acknowledge their presence. Said he:

"Our missiles program isn't doing so well. Maybe we'd better let Admiral Rickover take over the schools, and let us run the missiles program."

Dean Stephen Corey of Columbia's Teachers College picked up that cue. "We ought to listen to Admiral Rickover, as he is a distinguished layman, and in our country everyone has a

(*Continued on Page* 60)

RURAL SCHOOLS session was spirited. Shown are State Supt. J. C. Wright of Iowa; Rep. Lee Metcalf (D.-Mont.), co-sponsor of Murray-Metcalf bill; Howard A. Dawson and Mary Condon of N.E.A.'s rural education staff.

A Study of Trends and Major Problems

PUPIL TRANSPORTATION

THE NEXT TEN YEARS

An interview with E. GLENN FEATHERSTON by MARIAN TELFORD

SCHOOL transportation has been described as "big business." And so it is, because it takes about five cents of every school dollar and requires the operation of approximately 160,000 motor vehicles.

It is "big education," too, since it embraces this year an estimated 11 million pupils of the public elementary and secondary schools.

Some questions about school transportation cannot be answered with complete certainty. But of one thing everyone is sure: It will continue to expand—to involve more children and more school administrative units and to cost more money.

Inherent in the constant expansion of school transportation service is the need for careful consideration of some new problems and the reexamination of some old ones that gradually are assuming increased importance. To obtain the opinions of one of the nation's outstanding authorities on some of these problems, I talked with the assistant commissioner of education, E. Glenn Featherston, in his U.S.O.E. office in Washington, D.C., on June 16. Dr. Featherston's answers to my questions follow:

Although E. Glenn Featherston has been assistant commissioner for state and local school systems in the U.S. Office of Education since February, he still retains a very special interest in problems of pupil transportation. Officially, he served as a specialist in this field from 1943 to 1951, and though other problems and duties were assigned him after that time, he continued to be the outstanding transportation authority for the U.S.O.E. Dr. Featherston is a native of Callao, Mo. He was superintendent of schools in Madison, Mo., from 1922 to 1928, following service as a high school teacher and high school principal there. After a year as high school principal at Prairie Hill, Mo., he became superintendent of schools at Huntsville, Mo., and continued there until 1938. Then followed a few years as director of research for the Missouri State Department of Education, and two years as assistant state superintendent.

Would you enumerate some of the new problems and some of the old ones having new significance because of changing conditions, problems that will engage the attention of school administrators and transportation specialists and others for, say, the next 10 years?

To consider all of the foreseeable problems and needs—new and old—likely to be of significance for so long a period would take, I am quite sure, a whole series of interviews. At the outset, however, I think we might well consider the following because they affect many problems of a more limited nature: (1) the diversification of local school transportation problems; (2) the effects of funds available for transportation service; (3) the need to define more clearly the school's responsibilities in this area; (4) the effect of the federal highway building program on pupil transportation; (5) the need for establishing closer controls over the use of school buses; (6) the increasing use of school buses within cities, and (7) the need for specialized training of school transportation personnel.

What are some of the significant differences in the local school transportation picture and what do they mean?

Marked differences exist, for example, in the density of school population, and this affects the size and type of vehicle that can be used most economically, the length of routes, and, more important, perhaps, the length of time pupils are required to spend on a bus each day. This may be a health problem for very young children. Significant differences exist in the traffic patterns, the registration of vehicles, the licensing of drivers, as well as in operating practices and regulations. The states differ, too, on who is eligible for transportation and on the curricular and cocurricular uses to be made of school buses.

The foregoing and countless other variations among the states make the development of national standards both unwise and impractical. This is not to say, of course, that no standards are possible or even that recommended national standards would not serve a useful purpose with respect to some aspects of pupil transportation. Standards to be applied to the construction and equipment of the vehicle to be used in school service are entirely practical. A bus that is safe and economical to operate is safe and economical everywhere—in Florida, in California, or in Maine.

Does the availability of funds for school transportation touch the standardization problem in any way?

Surely. In fact, the amount of money available for school transportation may be a determining factor in the acceptance and observance of any standard. You will note that a series of five national conferences on school transportation have resulted in vehicle standards recognized as *minimum* standards. These minimum standards have resulted in the production of a vehicle that is reasonably satisfactory on a performance level. It is reasonably safe. It is reasonably economical to operate. These facts must be balanced against any effort to raise the standard in any way that would materially increase the cost of school buses.

Why do you feel that it may be well to define more clearly the school's responsibilities for school transportation?

School transportation is not now exclusively a school function. In all the states drivers and chauffeurs are licensed by a nonschool agency, the driver licensing authority. In many states school buses are inspected by a nonschool agency, usually the state police or state highway patrol. Not alone to observe current laws and practices but also in the interest of economy and efficiency, it would seem wise for school authorities to make maximum use of all nonschool

Photo, Los Angeles City Schools

School buses are scheduled during the day for field trips and other curriculum activities. These Los Angeles pupils are getting "treats" after a visit to a bakery.

governmental agencies staffed to handle competently any phase of the school transportation program.

I believe a few school transportation specialists feel that they should license school bus drivers. In my judgment this job may best be handled by those agencies established by law to license all drivers. I would make this exception, however. Where the driver's license examination is so weak that licenses are issued to individuals incapable of operating a school bus safely, school authorities would be justified in taking action designed to improve the situation.

Even so, I would suggest that school authorities not act independently—not at first anyway, but rather that they attempt to work out with the driver licensing authorities examinations and procedures that would keep the incompetent from getting licenses and from becoming applicants for positions as school bus drivers.

If the driver licensing officials do not go along with the cooperative development of stiffer examinations—and some of them might be prevented from doing so by some sort of legal restrictions—then, it seems to me, school officials are justified in taking direct action in the form of special tests and examinations that would have the same end result, namely the upgrading of the applicants for jobs as school bus operators.

Why do you feel that the federal highway building program may have some bearing on school transportation in the future?

It isn't quite accurate to say that the federal government's vast highway construction program *may* have some future bearing on school transportion service. Already it *has had* some effect in at least a few communities, and doubtless it will touch a greater number as the construction program expands. Limited access highways are bisecting established school districts, leaving "pockets" occupied by children dependent on school transportation. These children have become, as the result of the highway building program, relatively inaccessible.

Other problems are coming up. Are school buses to use the new highways? If so, are loading and discharge points to be provided by the highway engineers after consultation with school officials? If pupils are isolated in "pockets," will underpasses, or some other means of highway crossing, be provided for their use?

How can closer controls over the use of school buses be established?

Since school buses are in regular use only part of the school day, they are available for many uses not directly related to the regular transportation service. They are available, for example, to transport pupils to locations at which they may observe in operation some process they have been studying in their classrooms. In such cases the bus can be considered an instrument for the enrichment of the instructional program. Controls are necessary to make sure that the use of the bus is limited to those situations in which its use furthers the instructional program to an extent commensurate with the cost of the operation of the vehicle.

Recently I've noted in some cities that school buses are in use to transport children from a badly overcrowded school to another building in which several rooms would not otherwise be in use. Are more and more city school systems providing this kind of special transportation?

Yes, they are, as part of a vigorous effort to keep double shifts to the minimum. There are, however, other transportation matters of concern to city school administrators besides the specific type of situation to which you just referred. Many *suburban* areas do not have educational facilities close at hand to care for their school population. The density of population of school age children in these areas is likely to be high. (All of us know many families who have "moved out because of the children.")

Many of these rapidly expanding communities adjacent to cities lack not only sufficient schools but also adequate public transportation facilities. As a result, parents are paying for transportation service frequently provided by a local bus company established especially for this purpose. Some of these children live so far from their schools that they would be provided with free transportation if they lived in the country. If the schools transport *without charge* rural children living, say, 1½ miles from school, it is difficult for some parents to see why city children living the same distance from their schools should not be transported without cost to their parents. This is a complex problem and one that seems destined to confront us more frequently in the future.

What about the training of needed personnel?

You are, I assume, now asking about the training of administrative and supervisory personnel, not of school bus drivers. The training facilities for actual or prospective administrators of school transportation systems have not, I fear, kept pace with the growth of this educational area. Some institutions of higher learning offer courses in school administration that do include a few hours on school transportation. Because of time limitations, however, the material presented is largely in the nature of an overview of the school transportation problem. If I were asked to list institutions at which a person could enroll in courses providing detailed instruction on the specialized problems of school transportation, I would find it difficult to name many.

What is the recommended maximum distance a pupil should be transported?

This is another question for which there is no single answer. The school administrator gathers all the facts available on such matters as size of school district, location of children's homes, road conditions, traffic hazards, and weather conditions. Then he does his best to plan a transportation program that is safe, economical and as reasonable as possible.

Since there isn't any recommended maximum distance a pupil should be transported is there, perhaps, a national standard of some sort on the maximum length of time a child should spend en route to school?

There is no national standard, and I doubt if it would be feasible to attempt to develop one. This is another one of those problems where the variations between states are so great as to make a national standard impossible. However, some state departments of education and local school administrative units have established recommended time limits. These vary from one-half to one and one-half hours, depending largely on the density of the school population.

Would you list a few basic principles to guide those responsible for laying out school bus routes?

This question is related, of course, to the distance and time a pupil is required to travel. Routing is, perhaps, the most difficult task of the school transportation supervisor. Any layout of routes must be considered experimental, to be tested by trial runs and to be proved by actual operating experience. In regard to such items as the amount of time children may spend on a bus, for example, the transportation supervisor will be guided by what is acceptable to the community. The school transportation supervisor will establish and maintain a means through which information on changing conditions reaches him promptly. He will make adjustments in his plans where the need for them is indicated by experience.

What about the physically handicapped child who lives far enough from the school to be eligible for transportation? Are special provisions of some sort made for him?

To an increasing degree, yes. The transportation of such children may be quite expensive and in earlier years funds for it were not available. Special equipment may be necessary. This equipment varies greatly in cost.

In New Jersey and Washington, for instance, some buses used to transport physically handicapped pupils are equipped with seat belts. On the other hand, a few school buses (some of these, too, are in use in Washington) are equipped with ramps and automatic lifts.

Some localities use taxis to transport the handicapped because they consider this type of contract service more economical than transportation by bus, and because they feel it desirable to keep to a minimum the length of time the handicapped child is en route.

Just one more general question. Are there any new trends or developments on school transportation finance?

Yes. There is a trend toward making transportation a part of the basic program of state financial support. This is a natural result of the fact that transportation now is recognized as an important element in the total educational program. Incidentally, 42 states now provide financial aid for school transportation. #

QUESTIONS from the field

answered by MARIAN TELFORD

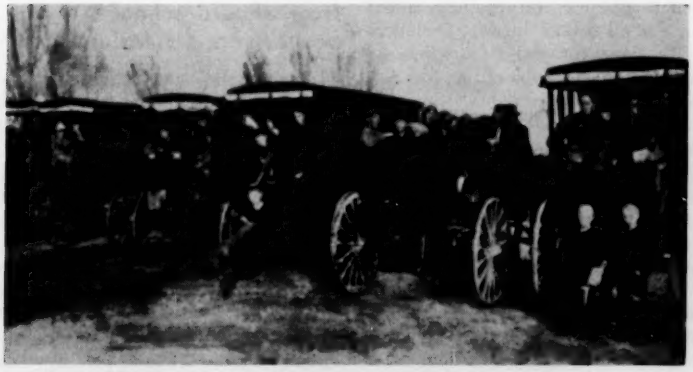
Up until the time of her retirement on June 1, 1958, MARIAN TELFORD had served the National Safety Council for 33 years. She joined the organization when its headquarters were in New York. She went to Chicago when the headquarters were moved there, and became the director of the school and college division, serving until 1945. Since then she had been a senior consultant there.

What determines who should ride the school bus?

Traditionally, a distance criterion has been used in determining who would be transported to school at public expense. A sampling of current practices in 20 representative states showed this criterion is still operative. Three of these states reported transporting both elementary and secondary school students living more than one mile from the school. Six of these states transported all pupils living more than 1½ miles away. Four states set the distance at two miles and one as much as three. Three states made a distinction between elementary and secondary school enrollees, requiring the latter to walk ½ mile farther. Two of the reporting states indicated that local school districts were authorized to determine when transportation should be provided and the others reported that transportation was to be provided for "reasonable" distances.

Distance criteria. Recently some questions have been raised on the continued use of the "distance criteria" to determine transportation needs. These questions have come largely from urban areas where the hazards to pedestrians walking along highways are pretty obvious. This problem was presented effectively at one of the school and college sessions of the 1957 National Safety Congress by Robert G. Hayes, assistant superintendent in charge of transportation for schools of Cook County, Illinois.

Mr. Hayes called attention to the following factors to be considered: (1) dangers to children inherent in foot traffic; (2) ages of children; (3) their physical fitness for walking the distance encountered; (4) traffic hazards, and (5) climatic conditions that might have some bearing on determining a reasonable walking distance.



A fleet of school buses in Montana, circa 1914.

Should seat belts be required?

During the last two or three years such organizations as the American Medical Association and the National Safety Council have been urging the use of seat belts in motor vehicles. The National Safety Council's policy statement on seat belts was issued in October 1955. It opens with the specific statement, "The National Safety Council recommends the use of seat belts in motor vehicles," and continues, in part, "The Council recognizes that seat belts will not prevent accidents, but can only reduce the severity of injuries in certain types of

motor vehicle accidents." School buses are not excluded from this recommendation.

Reactions of school transportation specialists to this recommendation were so varied that, in 1957, the Council's school transportation committee queried all state school transportation directors as follows:

Are seat belts used in school buses in your state?

If Yes, are belts used by drivers only? By pupils in front rows of seats? By drivers and pupils in front rows of seats? By all pupils?

Only three state directors reported that seat belts were in use. Kansas reported that they were used by "very few" drivers; New Jersey and Washington said they were used in the transportation of the physically handicapped pupils.

Other responses were: interested in use of seat belts, 2 states; desirability of seat belts in school buses questioned, 7 states; subject needs further investigation, 6 states; no thought given to the subject, 2 states. The remaining 30 states reported that belts were not in use nor was their use planned.

The Council reports that its brief questionnaire brought to light some related problems of particular interest. Most significant of these were the following:

1. "Wouldn't restraint by seat belt be harmful to certain types of children?" (At least 15 state directors of school transportation think it either "likely" or "a possibility.")

2. "Wouldn't seat belts be an added danger, rather than a safeguard, in certain types of accidents—in case of fire, for example, or where a bus leaves the highway and plunges into a body of water, such as happened recently in Kentucky and some years ago in Washington?"

3. "Do the present 'Minimum Standards for School Buses' provide a vehicle structured to support seat belts?"

4. "Wouldn't it be difficult to determine how many belts are needed? If three children occupy a single seat, for example, would three seat belts be required?"

5. "Is there any factual evidence that seat belts would decrease the number or severity of the types of accidents in which school bus passengers are killed or injured?"

6. "Aren't seat belts unnecessary in view of the relatively slow speeds at which school buses travel?"

7. "Could you unfasten a seat belt easily and quickly—if you were very scared and only 6 years old?"

8. "Isn't the whole question on the use of seat belts in school buses relatively unimportant?" asked a state director, who added, "Let's get seats for these kids before we try to get seat belts for them!"

Within the last few weeks seat belts have been reported as added equipment for school bus drivers in at least one county in North Carolina.

When is a school bus actually overloaded?

To many casual observers of school buses, a vehicle is overloaded if pupils are required to stand.

To those engaged in school transportation, however, the provision of a sufficient number of vehicles safely to transport all pupils eligible for transportation is a somewhat more complicated matter. A common method of defining the passenger load is as follows: "The gross weight of the vehicle when fully loaded (*i.e.* net weight, plus driver's weight, plus weight of maximum pupil load) shall not exceed the maximum gross vehicle weight rating of the vehicle as established by the manufacturer." The "maximum pupil load" is determined as one providing 13 inches of seating space per pupil.

"A seat for every child" is probably the simplest rule of thumb for use in determining the capacity of any vehicle in school service. At least 10 states apply this rule and do not permit standees. They report this rule to be a practical one.

What color are school buses in your state?

For many years it has been agreed by those concerned with school transportation that it would be desirable for all school buses to be painted a distinctive color. During many of those years, two color combinations had their supporters: what is now designated National School Bus Chrome (with black trim), and red, white and blue combination.

After studies by transportation directors and the National Bureau of Standards, National School Bus Chrome became the recommended color for all school buses. Technical specifications for the production of this color are available from the National Bureau of Standards, Washington, D.C.

School bus chrome. For the red, white and blue color combination, Michigan and Wisconsin held out longer than any other states. When they discontinued its use, it seemed that National School Bus Chrome would be universally used. Yet as recently as within the last 60 days, a traffic official who travels widely by car appealed for "the development of a standard color for school buses."

The major reason for this appeal would seem to be the failure of body manufacturers to use the specifications of the National Bureau of Standards or the failure of those purchasing buses to require that they be used.

A secondary reason for the failure to use National School Bus Chrome on all school buses may be in the way in which the recommended color is described in the state laws dealing with this point. According to the "Digest of Motor Vehicle Laws" published by the American Automobile Association in 1958, the following terms are used to describe the color of the school bus bodies the various states were willing to purchase:

National School Bus Chrome: Arkansas, Connecticut, Idaho, Montana, New Hampshire, Oregon, Rhode Island, Texas, Utah and Wisconsin.

National School Bus Chrome Yellow: Michigan, New York.

Yellow: Alabama, Arizona, Kentucky, Mississippi, Ohio, Tennessee, Virginia.

Chrome yellow: California, Delaware, Iowa, Kansas.

Yellow and black: Oklahoma.

Yellow with black lettering: Louisiana, South Carolina.

Yellow with black trim: New Mexico, North Dakota.

Yellow; fender and body trim, if used, black: Wyoming.

Federal yellow: Washington.

Orange: North Carolina.

Chrome orange: Minnesota.

Yellowish orange: Massachusetts.

Orange yellow: Indiana.

Orange and black: Florida, Maryland.

Golden orange with black letters: West Virginia.

According to the Digest the following states have no law governing school bus colors: Illinois, Maine, Missouri, Nebraska, Nevada, South Dakota, Vermont. The Digest gave no information on Colorado, Georgia and New Jersey requirements.

How should school bus drivers be trained?

Among the states there is wide variance on the care with which school bus drivers are selected and trained.

Every state has a minimum age requirement that drivers are required to meet. The minimum ages vary from 15 to 21 years.

Other factors often taken into consideration in the selection of school bus drivers are character, physical condition, knowledge of first aid, a special driver's license, and ability to operate the vehicle. While all these

factors are valid, the difficulty comes with the standard applied to each. An experience criterion, for example, requiring an applicant for a job as a school bus driver to "submit evidence of experience as driver of motor vehicle" may not reveal much about the applicant's actual ability to drive a school bus. Does the requirement "shall be of good moral character" tell enough about the driver to make him worthy of a position as important as that of a school bus driver, or the requirement "cannot be physically defective or of unsound mind" tell much about the applicant's actual physical condition?

Minimum standards. However, some standards really set an acceptable minimum. Some of these are: "Must have had experience and knowledge of the construction, mechanism and operation of large motor vehicle," "must undergo a physical examination before being employed and once each year during employment or at any other time deemed necessary by the school board," and "must pass written examination and driving test."

Almost equally wide are the variations in the training of school bus drivers, one state reporting as little training as 5 hours; another state requiring drivers to take an introductory course of 25 hours and an advanced course of 30.

Because of the diversity in the amount of time devoted to training, there is a wide range in the content of the instructional program. Typical of the courses varying in length from 12 to 20 hours are the following subjects: responsibilities of the school bus driver; child psychology; relationship to school officials, parents and pupils; traffic law enforcement; general operating rules; school bus patrols; vehicle maintenance; accidents and accident reporting; what to do in an emergency.

How are other state agencies involved?

At least two aspects of the school transportation program set it apart from other elements of the educational program. These are: (1) the need for cooperation between educational agencies and other governmental agencies, and (2) the public relations possibilities inherent in the school transportation program.

The need for cooperation between the educational agency and other departments of the state government is illustrated most clearly, perhaps, by the licensing of school buses and school bus drivers, the inspection of motor vehicles in school service, and the reporting of traffic accidents in which any school buses have been involved.

Licensing. Without exception, the licensing of the vehicle is, by law, the responsibility of another department of the state government. The licensing of the driver is, in every state, the responsibility of the driver licensing authority. In this regard, however, the department of education may take action if there is reason to believe that the general licensing standard is so low as to permit the procurement of drivers' licenses by persons not considered competent to drive a bus.

Currently state departments of education act in one of several ways to endeavor to raise the standard of those licensed to drive school buses. In one state, for example, an individual is required to get a special school bus driver permit issued by the department of education, in addition to a chauffeur's license issued by the driver licensing authority. In another state the state director of school transportation is required to certify to the motor vehicle department that the driver is approved.

Motor inspection. The maintenance of the school bus in a safe and economical operating condition may require examinations beyond the competency of many of those engaged in school transportation. If a state maintains a motor vehicle inspection program that includes school buses, it is generally considered unnecessary and unwise for the department of education to maintain a similar service.

Public relations. The brightly colored school bus on the highway speaks well of its school district—or fails to do so. If the vehicle is clean, the passengers are orderly, and the driver is obviously skillful, other highway users will be favorably impressed. If the bus is dirty, children permitted to shout at passing motorists, and the driver is careless, an unfavorable impression is made on the motoring public—an impression that may, even though unfairly, be carried over to other phases of the school's program.

How fast should school buses travel?

One state director of school transportation questioned the value of seat belts in school buses because of the "relatively slow speeds at which school buses travel."

Maximum speeds. This observation prompted an inquiry on just exactly what are the maximum speeds at which buses are permitted to travel when carrying pupil passengers. Information from 43 states showed these maximum speeds to be as follows:

Speed	No. States
Regular "posted" speed	4
30 m.p.h.	1
35 m.p.h.	11
40 m.p.h.	7
45 m.p.h.	8
45 to 50	1
50 m.p.h.	8
55 m.p.h.	1
50 to 60	1
60 m.p.h.	1

It should be kept in mind, as the foregoing figures are considered, that they refer to the maximum speeds at which school buses can be driven *legally*. They do not refer to the speeds at which school buses actually are operated over the highways. It seems clear that school bus speeds have been moving upward during the past few years. Doubtless this is a normal development in view of the tendency for all vehicular traffic to move more swiftly than in earlier years.

What other considerations must be made?

Before making decisions on such items as routing, the experienced school transportation supervisor establishes a fact gathering process enabling him to make his decisions on the facts of the case rather than on personal opinions, guesses or hunches.

Many items merit special investigation and detailed study. Some of these are listed here.

What are the optimum mileage and the optimum period for keeping a vehicle in service?

What types of insurance should be carried?

How extensive will the extracurricular use of buses be?

Under what conditions is it economically preferable to buy and maintain equipment rather than secure it through a contract service?

How can the application of new findings in social psychology be applied to the instruction of school bus passengers?

What is the value of two-way radios in school buses?

Can a licensing procedure be devised that will reveal the existence of skill, attitudinal and emotional problems that have been contributing factors in school bus accidents? (Is there any correlation by school bus accidents and the drivers other than accident experience? If so, driver applications should include questions designed to find out if the applicant has had other types of accidents.)

What preparation is needed for administrators of the school transportation program, and where and how can school transportation personnel get this special preparation?

Are modifications desirable in present legislation and practice regarding traffic observance of school buses? #

Photo, Courtesy Arizona Highway Dept.

One step removed from the horsedrawn school vehicle was early motorized equipment shown here. Used in Arizona, this motor "bus" was a truck chassis with a cab built on the rear.

WILLIAM McKILLOP
Research Department
The Nation's Schools

School Bus Programs—How They Grew

PUPIL transportation now is one of the more important auxiliary services of the public schools. This service has attained its present importance and size during the last 40 years.

Compare the Office of Education figures on pupil transportation for 1920 with those of 1956. In 1920, 356,000 pupils, 1.7 per cent of the total enrollment, were carried to and from school at public expense, but, in 1956, 10.2 million pupils, 30 per cent of the total enrollment, were similarly transported. Public schools used 159,764 publicly and privately owned vehicles to transport these 10.2 million pupils at a cost of nearly $356.5 million. Today, 10 states provide transportation for more than one-third of their pupil populations, 20 for more than one-fourth, and the remainder for more than one-tenth.

Probably the only people involved in pupil transportation in the early days of this service were the contractor and the school administrator or board member who represented the school in making the contract. Today the picture is radically different. First, the most widely accepted concept of pupil transportation is that it is an essential and integral part of the school program and just as much the responsibility of the school administrator as is the instructional program or the providing of adequate school plant facilities. Second, there has been a definite shift away from contract service to school operated service.

Began as contract service. In the beginning, of course, most of the vehicles used for transporting pupils were horse-drawn. Contracting with some farmer in the neighborhood to furnish the service was more sensible than building a barn, buying horses, and hiring someone to look after them. Certainly, under such circumstances, it was much more economical to contract for the service than to furnish it.

As motor vehicles gradually came into use in pupil transportation, it was quite natural to follow precedent and contract for the service. An equally important factor in promoting contract service in those days, since the service was wholly financed from local school funds, was the lack of sufficient funds to build garages and to purchase vehicles. Many states had legal barriers, too, that would have prevented such an expenditure of funds even if they had been available. For these reasons, pupil transportation was principally a contract service prior to World War II.

Pupil transportation is a relatively costly service, from the point of view either of its percentage of total school expenditures or its actual cost. In 1950, providing transportation for 7 million pupils cost $200 million; for 8 million pupils transported in 1952, it cost $239 million, and furnishing service for 10.2 million in 1956 cost $356.5 million. The large cost of this service is explained by the fact that it is a day-by-day service of considerable magnitude. In spite of these factors, however, pupil transportation service, for the nation as a whole, now is operating more economically and efficiently than ever.

Disadvantages of private ownership. As pupil transportation programs grew, and school administrators began to evaluate the efficiency of these programs, private ownership of school buses proved to have disadvantages as well as advantages. For example, some contractors made a business of the service, and profit from such service became the predominant consideration. Because the contractor also had to pay certain taxes not required of school districts as governmental units, this charge was added to the cost of the service and passed on to the schools.

It seemed obvious, therefore, and studies supported the conclusion, that a program under public ownership which operated as efficiently as a similar program under private ownership could also be operated at lower cost. Furthermore, a contract for pupil transportation usually was written in terms of providing a bus of a specified capacity to travel an approximate mileage over definite roads. Such a contract was quite inflexible and any changes which became necessary during the year required a readjustment that was not always easy to make.

In addition, the relationship between the school and the contractor is not the same as that between the school and an employe. Many school administrators found, therefore, that the program could be administered more effectively if the school district owned the buses, garages and equipment and employed the necessary personnel. They also found it easier to integrate the pupil transportation program into the total administrative complex. Finally, during the war many school districts were unable to compete with others in contracting for the service, and because new buses were not available for purchase, they found themselves unable to provide needed pupil transportation programs.

More privately owned. All these factors combined to make a shift in school bus ownership which has been pronounced during the last 10 years. In a survey of school bus ownership, the Office of Education found that of the 99,000 vehicles on which information as to ownership was available in 1950, about 65 per cent were publicly owned and 35 per cent were privately owned. This was an almost exact reversal of the figures the Office of

Education had reported in 1935. By 1956, 102,194 vehicles used in pupil transportation were publicly owned and 57,570 were privately owned. The 1956 percentages are approximately the same as those of 1950.

Related to the trend toward public ownership of school buses is another toward the operation and maintenance of garages by school districts. Hundreds of such units in the United States today operate fleets of as many as 150 buses.

Maintenance workers used. The bus maintenance worker, or mechanic, is a relatively new but increasingly frequent addition to the ranks of school district employes. Locally operated school bus maintenance garages perform a variety of tasks, ranging from simple tire maintenance, lubrication and washing to complete overhauling and repair. A single driver-mechanic may perform the simpler maintenance duties in a small school district, but in the larger districts a crew of mechanics, helpers and servicemen will be needed to carry on the complete maintenance services. Both state and local units are recognizing the importance of this group by encouraging or providing special training.

School bus drivers are the largest single group engaged in pupil transportation. More than 140,000 people drive school buses daily for periods ranging from two to eight hours. Many of these people are employed full time either on the pupil transportation service alone or on a combination of duties. Since their work is so important, more and more of these people are selected as bus drivers on the basis of definite standards and are given some degree of training.

Many members of the school staff employed primarily for some other purpose are becoming more closely associated with the transportation program. In many states, the school principal has definite responsibilities regarding the program and in some states the teachers also have certain duties. Probably no other school service has involved so many employes, both old and new, in so short a space of time as has pupil transportation.

Changes in financing. Financing the service is another aspect of pupil transportation that has undergone many changes. The early programs were almost wholly financed from local funds. In those early days, schools commonly charged pupils a fee for the service, a practice that persisted in certain regions until recently. It was soon realized that the need for pupil transportation service was another of those factors tending to create inequalities in the educational program.

For example, if two adjoining districts have approximately equal financial resources and numbers of pupils to be educated, but one must transport large numbers of pupils to school because the population is scattered, this district obviously has less money to devote to the educational program than the other. Students of school finance soon agreed, therefore, that transportation must be one of the elements in any program of education toward which the state would provide financial assistance.

Sharing the costs. This trend toward state and local sharing of the costs of the pupil transportation program has become most noticeable since World War II. Today, in 40 of the 48 states, some financial assistance is provided by the states to the local schools in support of the transportation program. In several states, this assistance is insufficient to induce the local districts to provide the service. Other states subsidize the full cost of a minimum program.

This variation in policies and practices is one of the distinguishing characteristics of the pupil transportation program from state to state. It does not, however, greatly influence the trend toward the adoption of such programs in local units or the trend toward district ownership of buses and garages, or school employment of service personnel.

Pupil transportation service is still growing. The development of adequate vehicles and the parallel construction of good highways have made extensive transportation of pupils feasible. This, in turn, has made rapid and widespread consolidation of school districts possible. The interacting relationship between accelerated consolidation of school districts and extension of pupil transportation service is not only obvious but is also highly important.

Since many states still have thousands of small administrative districts and most of them are actively engaged in programs to reduce the number, it is equally obvious and important that further extension of pupil transportation service will be made. The success of consolidation programs is partly dependent upon the development of safe, efficient and economical pupil transportation programs in these states. School transportation was not merely designed as a convenience to children living beyond a reasonable or safe distance from school, but, in theory and practice, pupil transportation service is an indispensable and integral element of our public school system. #

When land buses can't get them to school, children in Louisiana take to the water. Here pupils enjoy their ride on one of the state's 16 school boats as it churns its way through the swamplands that surround the Black Bayou.

Many Traffic Hazards Justify Short Distance Transportation

TRAFFIC engineering has made great strides in recent years, but we have done little to utilize the background and experience of the traffic engineer in the development of school transportation criteria.

This is the judgment of Cecil G. Zaun, supervisor of safety for the Los Angeles city school system. Mr. Zaun served on a 31 member community committee studying school bus transportation. It reported its findings in May.

Four criteria. Pointing out that transportation of pupils by school bus is just as much a part of the school's traffic safety program as are traffic signs, signals and road markings, adult crossing guards or school patrols, Mr. Zaun emphasizes that criteria must be established whereby transportation will be provided under the following conditions: (1) when hazards to be encountered are too great for the age group involved; (2) when distances are too great to expect children to walk to and from school; (3) when assurance is needed by school authorities that like situations are receiving like treatment, and (4) when it becomes necessary to prevent pressure groups from favoring some children over others.

Many hazards. Hazards to be considered, Supervisor Zaun explains, include, but are not limited to, the following conditions:

Lack of off-street walking space, volume of traffic, width of road and width of lanes on multiple-lane highways, steepness of grades to be traversed for long distances, and severe and prolonged weather conditions.

Other hazards to be considered are: temporary road construction, which may make pedestrian travel impossible; horizontal or vertical curves, which may impede sight distance of motorists; safe driving sight distance on narrow, mountainous roads with little traffic, and intersection controls or lack of these when speed is high.

"Children are just as deserving as are their parents when it comes to lessening the hazards to be encountered on our streets and highways, regardless of whether they live in one of our cities or in a rural area," Mr. Zaun believes.

The Los Angeles community committee held monthly meetings beginning in October 1957. It concerned itself with the development of a set of criteria that could be used to determine whether pupil transportation should be provided on the basis of hazards encountered *as an exception* to the basic mileage limit policies of the board of education. Members of the committee represented a variety of organizations interested in motor vehicle transportation and its regulation, including the county road department, the Los Angeles traffic and police departments, the district parent-teacher association, and all levels of school administration.

Five exceptions. In its final report, the committee made recommendations to the superintendent of schools as to the authority he might exercise to grant exceptions to the basic mileage limits when, in his opinion, conditions were sufficiently hazardous to justify transporting pupils shorter distances. As an administrative policy or regulation, the report of the committee recommended that exceptions be granted under the following five conditions:

1. Limited walking space combined with traffic volume. If total traffic volume on other than mountainous roads exceeds 120 vehicles an hour while children are en route to or from school, and if one or more of the following conditions exist: (a) less than 3.5 feet of walking space outside of a curbed roadway on at least one side of the roadway; (b) a two-lane road of 30 feet or less, in width, or a four-lane road of 50 feet or less in width, with less than 10 feet of road shoulder (paved or unpaved) on at least one side (a sliding scale of shoulder width and street width is to be used), or (c) a two-lane road of 30 feet or more, or a four-lane road of 50 feet or more in width, with less than 5 feet of road shoulder (paved or unpaved) on at least one side of the road.

2. Obstructed walkways. If shoulder, paths or sidewalks on roads with a volume of 120 vehicles an hour are obstructed continuously for 75 feet or more, or. if obstructed for less than 75 feet but there is less than one space gap per minute between vehicles that are traveling on the near side of the center lane.

3. Mountain roads. When mountainous road conditions impair the safe driving sight distance on two-lane roads of less than 30 feet in width, when little or no off-street walking space is available, and when the traffic volume exceeds 60 vehicles an hour.

4. Impaired sight distance. When the traffic volume exceeds 180 vehicles per hour through the crosswalk of an uncontrolled intersection where the safe driving distance is impaired and the crossing exceeds 40 feet in width. (Speed is computed in figuring safe driving sight distance.)

5. Prolonged obstructions. When, owing to construction or weather, the only safe route to school is made unusable or impassable for a period in excess of one week.

In the event transportation is approved under any of the foregoing five exceptions, such transportation is to be discontinued immediately upon improvement of the conditions for which transportation is provided.

Closer-in transportation desired. The committee further recommended that state legislation be introduced that would provide more equitable reimbursement for transportation.

Some of the discussions indicated that present mileage limits are unrealistic in areas where no public transportation is available. While recognizing that parents have the ultimate responsibility for getting children to school yet it was believed by some that the additional transportation needed in view of increasing traffic hazards should be provided. Also it was held that parents should be allowed to pay for this transportation, not possible under present California laws.

The committee omitted reference to the question of mileage limits from the suggested criteria because of the belief that this was a matter of board of education policy, rather than one of administrative regulation. The committee did recommend that serious consideration be given to the reduction of the existing mileage limits. It also was suggested that proper authorities analyze the health problems encountered by children who must traverse grades of 10 per cent or more for long distances.

While field studies conducted on a limited basis indicate that some additional transportation will result from adoption of the criteria suggested by the committee, the administrators on the committee believe that principals can now justify to the community any exceptions made in one area or another, and that parents will feel that like situations are receiving like treatment. #

Several Principles of Law Affect Pupil Transportation

One decision concerns authority of bus drivers to maintain discipline

LEE O. GARBER
Director, Educational Service Bureau, University of Pennsylvania

TODAY'S emphasis on pupil transportation is reflected in both legislation and litigation. Most of the earliest legislation in this field was intended to clothe boards of education with the authority necessary to transport pupils. Much of it was permissive in character—*i.e.* it permitted school boards to provide transportation whenever, in their judgment, it was thought necessary, but it did not, as a rule, require them to do so. Later, legislation *requiring* school boards to transport pupils living certain stated distances from the schools of their attendance began to be adopted. Both types of legislation gave birth to various kinds of litigation. Out of this litigation certain general principles of law, some of which follow, have evolved and are now rather generally accepted.

1. **In the absence of evidence** showing that the board acted arbitrarily in ruling that a particular child was not eligible for transportation, the courts will not interfere with its exercise of discretion.

2. **In determining the distance** a child has to travel to and from school, courts will not measure the distance "as the crow flies" but from the front gate of the pupil's home to the school door by the nearest generally traveled route.

3. **In establishing bus routes,** courts will not interfere with a board in the exercise of its discretion, if it acts fairly.

4. **School boards will not be required to pick up each child** at his door; children may be required to walk a reasonable distance to a bus route or a designated bus stop.

5. **In applying general statutes,** such as those requiring boards to transport those children who do not reside within a "reasonable" distance from school, the courts, in determining what is "reasonable," do not consider distance alone but also take into consideration such factors as the age of pupils, the hazards involved, and the condition of the highways or roads.

LIABILITY INCREASING

Today legislators are passing laws relating to liability. For example, they are permitting or requiring school boards to carry liability insurance. In some cases they are definitely abrogating the school district's immunity from liability for injuries resulting from the negligence of bus drivers. They are passing laws defining the legal status of bus drivers; in at least one state bus drivers are now given tenure status.

Legislators are becoming safety conscious and, as a result, much new legislation is concerned with the development and adoption of safety standards for school buses. Likewise, they are enacting legislation extending transportation privileges to other than public school pupils.

Litigation of the earlier types has become a rarity. Enough cases have been decided so that precedents have been established which are, in reality, the law today.

Litigation continues, but it takes its cue pretty largely from the newer types of legislation being enacted. Much of this litigation concerns the liability of school districts and bus drivers for injuries resulting from school bus accidents. This, it is evident, grows out of the fact that more and more states are enacting legislation requiring or permitting school boards to take out liability insurance covering school buses.

OTHER ARTICLES on transportation decisions written by Dr. Garber for The Nation's Schools include:

Legal Problems Ride the School Bus. Nearly 40 cases that deal with many phases of school transportation are cited. April 1957, p. 85.

Negligence on Field Trips and Excursions. A list of precautions to follow in planning field trips is given for administrators and teachers. September 1955, p. 82.

When Must a School District Provide Transportation? When states make transportation mandatory, districts are left to work out the details. November 1953, p. 76.

District Liability for Bus Accidents. Immunity outside the state is discussed. November 1952, p. 79.

Legal Responsibility of Bus Operators. A ruling that bus drivers are not immune to liability. January 1952, p. 41.

Another problem is that in which the courts are asked to interpret statutes that permit school boards to contract for the transportation of pupils rather than to purchase and operate buses of their own.

A different type of controversy is the one involving the authority of a school board to transport private and parochial school pupils as well as public school pupils in the absence of a statute authorizing it to do so, and the constitutionality of laws requiring local boards to transport such pupils.

A type of case that bids fair to become more common concerns the status and authority of the bus driver. Is he on tenure? Can the board remove a tenure driver if he is in poor health? Is he personally liable if he drives a bus he knows to be in poor mechanical condition? What authority does he have over the pupils riding in his bus?

As long as transportation programs were not too common and as long as legislation and litigation in this field concerned itself rather largely with the authority of school boards to provide transportation, it was not too important for school administrators to have a knowledge of the law. Now, since transportation has become a common practice and since legislation and litigation have concerned themselves with administrative details of the program, it behooves the superintendent to keep abreast of the law as it is enacted by the legislature and expounded by the courts.

Particularly is it important that school administrators have some knowledge of the rulings of the courts on matters growing out of transportation, as these rulings have the effect of law—in reality, they are the law—in cases in which they are applicable.

A report on a recent case fairly typical of current litigation, one that

has administrative implications, follows. It concerns the authority of a bus driver to discipline pupils in his care.

Next month I shall report on a case concerned with the question of whether a municipal transit system or carrier operating under the standards set up by the state public utilities commission must also meet the standards set up for school buses if it has contracts with a school board for transporting pupils.

Later articles will deal with the question of whether a regional high school district is required to transport those elementary as well as high school pupils that are enrolled in parochial schools, and with the liability of board members for injuries resulting from the gross negligence of a truck driver employed by the board.

And now to the question of the bus driver's discipline of pupils on his route.

* * *

WHILE much has been said and written on the problem of maintaining discipline on school buses, surprisingly enough, there has been little litigation in this field. Therefore, a recent New York court decision, in which a child, under the age of 16, was declared a delinquent after being found guilty of disorderly conduct when she disobeyed repeated instructions and orders of the bus driver and resisted efforts by the driver and vice principal to remove her from the bus, is of more than passing interest.*

Before considering this case in detail, it should be noted that, in general, courts are in agreement that pupils must obey all reasonable rules and regulations of school authorities, and that, for their failure to do so, they may be punished. Just who is permitted to do the punishing is not always clear. There is little question, however, with respect to the authority of teachers and administrators to punish pupils for violating school rules, in the absence of statutes or board rules forbidding them from so doing. Such individuals are said to stand *in loco parentis* to the children.

The situation is not quite so clear with respect to bus drivers. Do they stand *in loco parentis* to the children? May they punish pupils for misbehaving on buses? May they eject pupils who do misbehave? Just what is the extent of their authority over pupils in their care? These and other similar questions appear not to have been answered as yet.

It is clear, however, that it is the responsibility of the driver to maintain good order and discipline on his bus, and that, if, as a result of his failure to do so, someone is injured, the driver may be held liable.

This case was one brought by the vice principal of a school in Williamson, N.Y., to have a child declared a delinquent on the ground that she had been guilty of disorderly conduct within the meaning of Section 720 of the Penal Law, and that she was "incorrigible, ungovernable or habitually disobedient and beyond the control of lawful authority." On April 29, 1957, the respondent, Willie Mae Neal, boarded the bus to take her home from school. At the time, she was eating some fruit. Because of a rule of the school authorities forbidding eating on the bus, the driver told her she must put it away. After the bus started, he noted she was still eating and again warned her but she refused.

Thereupon he stopped his bus, went back to where she was sitting, and told her she would either have to stop eating or get off the bus. She was then alleged to have told the driver her folks were taxpayers and she didn't have to get off the bus. Then some sort of altercation took place. Apparently exasperated, the driver put his hand on her shoulder, preparatory to ejecting her, and she allegedly bit him —a matter which she denied—and he then slapped her face, returned to his seat, and drove back to school.

He reported the incident to the vice principal, who came out on the grounds, entered the bus, and requested Willie Mae and her sister to accompany him to the principal's office for the purpose of settling the matter. Again Willie Mae appears to have insisted on "her rights" to remain in the bus. After trying to reason with her for some time—variously estimated at five to 15 minutes—the vice principal ejected her "from the bus with the aid of some physical force." While all this was happening "other children in the bus, particularly the small children, became upset and began to cry."

DENIED CHARGES

Willie Mae denied she bit the driver and claimed to be unfamiliar with any rule of the school authorities prohibiting children from eating on the bus. She also contended "that the acts did not amount to disorderly conduct and that at most . . . [they] constitute an isolated case of simple disobedience at a time when . . . [she] was under a great strain as a result of being struck by the bus driver." The court rejected this contention, however.

In so doing, it stated that it was satisfied that the occurrence at the time the driver slapped respondent, and again in the school yard when Willie Mae had to be forcibly ejected, "were such acts as would tend to a breach of the peace and did actually disturb and annoy other students in the bus, particularly the younger students in the lower grades." The court also stated its conviction that the school bus was a "public place" within the meaning of the law, because there were a number of students on the bus who "had a right to be . . . [there] and in fact might be called captive witnesses. . . ." Furthermore, the court held that this was "not a case . . . which requires repeated acts of insubordination, as in the case of truancy." As a result, the court held Willie Mae to be delinquent after finding her guilty of disorderly conduct.

As was stated, this case leaves unanswered the question of the right of the bus driver to discipline children. Had he ejected Willie Mae as he attempted to do, and had she brought an action against him for so doing, it would be interesting to know how the court would have ruled. Here was a case of a bus driver attempting to enforce a rule of the school authorities which, by implication at least, the court held he had a right to do. From it there are certain observations that may be made.

USED GOOD JUDGMENT

In the first place, the driver, in this case, appeared to "use his head." Instead of ejecting the girl by physical force, as he was, undoubtedly, capable of doing, he turned back and let an administrative officer of the school handle the problem. Whenever possible a bus driver should let school officials administer punishment for the infraction of rules. Only when the situation is of an emergency nature should he attempt to handle it himself.

Finally, the action taken by the vice principal, in this case, may supply, to some administrators, the answer to discipline problems arising out of pupil transportation. In the case of chronic offenders, the administration might well consider bringing charges against them for disturbing the peace. The statutes of the various states differ but, undoubtedly, all define this offense in such manner that it could be made applicable to those who refuse to obey the reasonable rules which a bus driver should enforce. In this case, the girl was declared a delinquent. Had she been older than 16, she would probably have been subject to a fine. While having a girl declared delinquent is rather harsh punishment for one who violates a simple rule as the one here which forbade eating on the bus, it might be well to note that on two previous occasions the vice principal had found it necessary to talk to Willie Mae about "her acts and that on one of these occasions it concerned her acts on a school bus." #

*In the Matter of Willie Mae Neal, 164 N.Y.S. (2d) 549.

States Pinpoint Bus Problems

TOPPING the list of pupil transportation problems is the safety of the children being transported. That is evident from a recent survey of the officials of state departments of education and of other state departments responsible for school transportation. Repeatedly there was emphasized the key rôle of the school bus driver, and the importance of the selection, training and supervision of drivers.

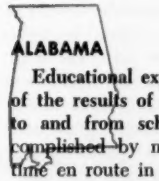
With the ever increasing school enrollment has come a growing need for more pupil transportation facilities and for more adequate financing. Greater state participation was urged by some, more efficient use of present equipment by others.

In the interest of safety, a greater uniformity was repeatedly called for in the operation of school vehicles as well as in the laws under which they operate. The need for the nationwide adoption of minimum bus standards and the importance of enforcing present standards was stressed.

There were repeated pleas for methods to overcome the hazards met daily by children who have to cross arterial highways on their way home. Rearranging bus routes to operate on either side of thoroughfares was suggested. Also, the demand is increasing for developing some means of assuring safe passage for children walking to school through heavy traffic zones.

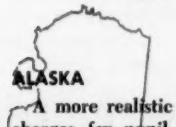
As in other areas of the education program, much of what is presented as problems in pupil transportation today could be solved by more adequate financing. Toward that end general awareness was expressed among transportation officials of the need to develop a greater consciousness on the part of parents and the general public of the hazards involved in pupil transportation. In some instances, greater concern on the part of the local school administrator was said to be necessary.

While most state officials answering the questionnaire had numerous suggestions on various phases of pupil transportation, to avoid duplication the following comments were adapted for purposes of this study:



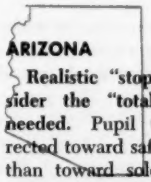
ALABAMA

Educational experiences should be one of the results of the children's bus trips to and from school. This can be accomplished by making the best use of time en route in observing and integrating interests with classroom activities. Good use also should be made of buses for instructional trips.—O.P. RICHARDSON, *assistant director, division of administration and finance, state department of education, Montgomery.*



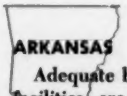
ALASKA

A more realistic basis for determining charges for pupil transportation should be developed. All Alaska operations, save two, are privately contracted, with the legislature paying 100 per cent of the bill. Since cost per bus mile does not necessarily have any direct relationship to the actual cost of operating the equipment, it is suspected that the bus mile rate currently paid is based on "all the traffic the legislature will stand."—HOWARD A. MATTHEWS, *educational assistant, department of education, Juneau.*



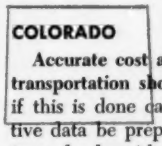
ARIZONA

Realistic "stop" regulations that consider the "total" safety program are needed. Pupil training should be directed toward safe living practices, rather than toward solely protective measures through 12 years of schooling. Uniformity of operation and a general upgrading of driver requirements in the 48 states should be sought.—S. G. BLAKNEY, *inspector of highway safety engineering department, state highway department, Phoenix.*



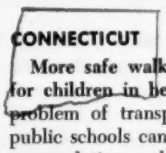
ARKANSAS

Adequate bus maintenance service and facilities are among the major means contributing to pupil transportation safety. To achieve the desired results, mechanics must be competent. In Arkansas, mechanics are called in once a year for a week's training provided through the cooperation of the college and the state department of education. At a cost of only $15, including room and board, instruction is received from thoroughly qualified representatives of chassis manufacturers in better methods of servicing their equipment.—J. L. EIDSON, *state department of education, Little Rock.*



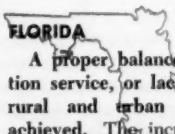
COLORADO

Accurate cost analysis figures on pupil transportation should be obtained. Only if this is done can meaningful comparative data be prepared and used in guiding schools with bus operations. Committees of educators studying the problem of establishing workable business procedures should make their recommendations available to school districts.—ROBERT M. COCHRANE, *director of transportation services, state department of education, Denver.*



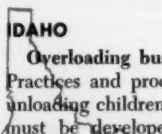
CONNECTICUT

More safe walk areas should be built for children in heavy traffic zones. The problem of transporting pupils to nonpublic schools can best be solved by accommodating only public school children.—CHARLES F. RITCH JR., *chief, bureau of field services, state department of education, Hartford.*



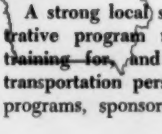
FLORIDA

A proper balance between transportation service, or lack of service, between rural and urban children should be achieved. The increasing complexity of school buses requires training of mechanics to repair vehicles and to maintain them in good operating condition. The need for studying ways that will enable pupils to cross multi-lane highways safely to reach their home is pressing.—J. POPE BAIRD, *transportation consultant, state department of education, Tallahassee.*



IDAHO

Overloading buses must be prevented. Practices and procedures in loading and unloading children on four-lane highways must be developed, especially in areas where the arterial highways are the principal avenues of travel. Use of larger buses and cost studies can help solve the financing problem.—ALLEN P. JEFFRIES, *superintendent of transportation, state department of education, Boise.*



IOWA

A strong local school district administrative program must assure adequate training for, and supervision of, local transportation personnel. Local training programs, sponsored and conducted by

A side gate lift is one of the features on five of the 20 specially equipped school buses used to transport the handicapped children in Newark, N.J.

the proper state authority, should be required.—W. T. EDGREN, *director, division of transportation, department of public instruction, Des Moines.*

ILLINOIS

More and better supervisory assistance must be provided for pupil transportation on the state and local levels. The difficulty of meeting the major problem of obtaining and training competent bus drivers must be met, and ways must be discovered to obtain the needed funds. —J. C. MUTCH, *office of public instruction, Springfield.*

KANSAS

Ways to finance a program for the increasing number of pupils to be transported must be discovered. School officials at the state and local level must realize that if small schools are not permitted to operate, but instead are consolidated, the state has a moral obligation and should assume a legal obligation to pay the cost, in part at least, of taking pupils to other schools. Ways must be found to meet the increasing demand of parents to transport children for shorter distances through hazardous traffic areas. —RALPH STINSON, *state department of public instruction, Topeka.*

MAINE

There should be greater uniformity among states concerning minimum standards of transportation equipment. And prevailing minimum standards should be more rigidly enforced. Regional conferences at which such problems are discussed are a help. The N.E.A. has done a fine job with meetings in this area.—KEITH L. CROCKETT, *school plant division director, state department of education, Augusta.*

MARYLAND

The development of an effective training program for bus operators—inservice as well as preservice programs—is one of our transportation problems. This can be solved only at the local level with the state providing leadership. Workshops for transportation supervisors and bus operators held in our state have stimulated interest in developing training programs.—W. S. SARTORIUS, *assistant state superintendent in administration, finance and research, state department of education, Baltimore.*

MICHIGAN

Considerable research is needed in the whole area of pupil transportation with special reference to costs and school bus operation. Transportation should be accepted as an integral part of an equal educational opportunity. To assure the safety of both children and other users of the highway, the cooperation of both parents and children is needed as part of a continuing cooperative study by all interested persons.—LYNN M. BARTLETT, *superintendent of public instruction, state department of public instruction, Lansing.*

MINNESOTA

There should be constant and continued study by experts in pupil transportation. Findings should be disseminated regularly to those working in the field on both the state and local levels. Trained personnel and leaders in the field should be provided; don't push this work off on someone without interest or experience. School transportation accessories should include fire extinguishers, first-aid kits, flags and flares.—M. J. HAGGERTY, *supervisor of transportation, state department of education, St. Paul.*

MISSOURI

School districts must make every effort to provide the money to pay for the cost of school bus transportation. In the more densely populated areas and where road conditions are excellent, a partial answer to the financial problem has been found by the employment of women drivers. A male driver working 1½ hours in the morning and a similar amount of time in the afternoon finds that this interferes with obtaining work between those hours, and therefore the pay he demands for driving the school bus equals that of a full-time job.—ARTHUR L. SUMMERS, *district reorganization and transportation, state department of education, Jefferson City.*

MONTANA

A reexamination by state legislators of the economy of a sound school transportation program can best solve the pupil transportation problems of safety and finance. Equality of educational opportunity can come to a rural pupil only through effectual use of school transportation systems. The driver is a key to a good school bus program. Local districts must require a training period and careful supervision of all drivers. —PARKS WHITMER, *director of school transportation, state department of public instruction, Helena.*

NEBRASKA

One of the major problems of pupil transportation is that of loading and unloading pupils. I cannot help but wonder how long it will be feasible, in the face of the increasing number of vehicles, to stop traffic to load and unload school buses. Quite possibly we should look to the use of loading and unloading areas constructed clear of the highway, but this would still leave the problem of children crossing.—AVERY J. LINN, *director of transportation, state department of education, Lincoln.*

NEVADA

Flashing light laws should be standardized from coast to coast, so that when motorists travel from one state to another they will know exactly what is expected. There also should be national standardization of recordkeeping, so that when figures from one state are compared with those of another they will have meaning. There is real help in being able to see what another state is doing transportation-wise.—HERBERT CHIARA, *deputy superintendent and state transportation consultant, state department of education, Carson City.*

NEW JERSEY

The question of state aid must be resolved. Hazardous road conditions compel boards of education to transport pupils without reimbursement by the state. In order to overcome these conditions it would be necessary for the legislature to change the mileage limit to 1½ miles (from 2 miles for elementary, and 2½ miles for high school). This would cause a tremendous increase in the cost of transportation aid, and a reduction in the state aid percentage from 75 per cent to approximately 50 per cent. —ORVILLE J. PARRISH, *state coordinator of pupil transportation, state department of education, Trenton.*

NEW YORK

State aid for the erection of school bus garages is needed to correct the lack of proper facilities for storage and servicing of school buses. Standardization of buses and equipment serves to keep costs down. A better coordinated program is needed to assure a more complete understanding of the responsibilities of school and home for the discipline of children aboard school buses.—M. G. OSBORNE, *director, division of school business management, state education department, Albany.*

NORTH DAKOTA

The problems of this rural state can best be solved by improving the roads used for school transportation. Since distances here are great and the terrain is rough, better vehicles need to be utilized. Any major aid in the solution of the problem depends on the reorganization of school districts so as to increase financial resources, or on state aid.—M. F. PETERSON, *superintendent, state department of public instruction, Bismarck.*

OHIO

Safety instruction should be part of the regular school curriculum. This instruction should be aimed not only at safety in school transportation, but also at the goal of developing responsibility in each pupil for his own protection in all phases of activity. We now have few accidents caused by equipment failures, so our Number 1 problem is the elimination of serious accidents attributable to human failures—of the bus driver, the transported child, and the motoring public. The Number 2 problem is the improvement of practices of routing, designing stops, purchasing and maintenance. —FRANK D. COCHRAN, *supervisor of transportation, state department of education, Columbus.*

OREGON

We need to develop uniformity in the handling of our transported children throughout the United States. Then, too, there should be a uniform method of operating all flashing warning signals so that traffic will not jam up and cause rear-end collisions. The motoring public should know what protective measures are used for the children from state to state.—A. H. WRIGHT, *director of transportation, state department of education, Salem.*

SOUTH DAKOTA

Procuring adequate and conscientious bus drivers at the salary most of our school districts are able to pay is one of our major problems. We face another difficulty in this state: In South Dakota it is considered an illegal expenditure of district funds to purchase liability insurance. Yet an equitable insurance program for public liability and property damage is needed.—JAMES C. SCHOOLER, *consultant, school transportation, state department of public instruction, Pierre.*

TENNESSEE

Protection must be provided for children walking to school. The rapid development of suburban areas without sidewalks has created a problem in areas with heavy traffic. The danger to pedestrians makes it almost mandatory to provide transportation in such closer-in areas. Routes in the future will have to be planned to serve both sides of new highways in order to eliminate the necessity of school children crossing to reach

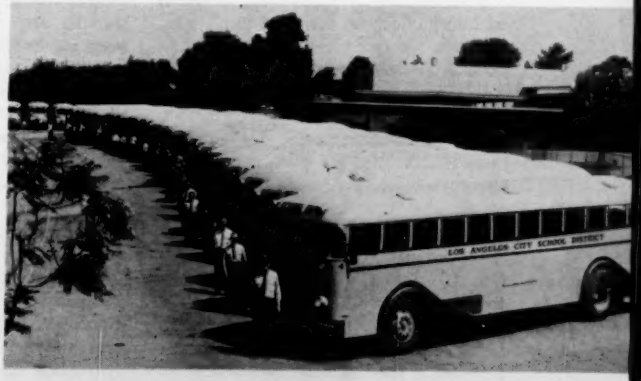
THE COVER . . .

THE pupil transportation system of Los Angeles public schools is believed to be the largest in the nation. The larger picture on the cover shows a freeway in downtown Los Angeles. Seen in the traffic are four of the district's 387 school buses as they start out early in the morning. The school board owns 89 of these buses and contracts for the use of 298 more. During the school year these buses will travel approximately 4.5 million miles, transporting children between home and school in the 450 square miles of the school district. Pupil transportation cost Los Angeles last year $3,211,178, or 1.6 per cent of its total budget.

Shown on this page in lower picture at right are some of the more than 5000 children who are transported on approximately 128 *curriculum* trips daily. During the year more than a million children are taken on visits to the Los Angeles Civic Center, to commercial bakeries, to the airports, to museums, and to cultural presentations.

The Los Angeles schools own approximately 600 pieces of rolling stock, ranging from these 89 passenger transit buses to large semitrailers, pedal trucks, automobiles, refrigerator trucks, garbage trucks, and even a jeep or two.

Photo, Los Angeles City Schools



their homes. Because growth in enrollment has affected pupil transportation as well as other phases of the educational program, it is difficult to procure sufficient funds for added transportation when funds also are needed for replacement of equipment and salary increases. —T. WESLEY PICKEL, *coordinator, division of school plant, pupil transportation and special services, state department of education, Nashville.*

TEXAS

Dangers on school buses, and when loading or unloading, could be decreased by educating the general public to such danger through the use of radio, television and newspapers. The increasing cost of school bus transportation must be met by increasing allocations, by curtailment, or by better utilization of present equipment and personnel. Special examinations, improved training programs, and increased salaries are needed to help solve the problem of the shortage of qualified bus drivers.—J. W. EDGAR, *commissioner, state department of education, Texas Education Agency, Austin.*

UTAH

Experimenting should be done with plans which will permit students to participate in cocurricular activities after school hours without forfeiting their bus ride. Should transportation facilities for these services be provided on Saturday? Thought should be given to the purchase of buses by states under a bid arrangement.—WILBURN N. BALL, *assistant superintendent, state department of public instruction, Salt Lake City.*

VERMONT

More state participation is needed to help solve the cost of transportation, particularly in smaller communities. There should be statutory permission to transport pupils in all grades of the school system. The problem of transporting private and parochial school children needs to be studied. —RUPERT J. SPENCER, *director of administration, state department of education, Montpelier.*

WASHINGTON

Better roads and more and improved highway safety signs are needed. Toward that end, school, highway and state patrol personnel need to work together with the state legislature. Funds must be provided to permit the purchase of sufficient and adequate equipment and to permit payment of salaries to school bus drivers. A more effective preventive maintenance program for buses needs to be developed.—E. E. KIRKPATRICK, *supervisor of finance and pupil transportation, office of the state superintendent, Olympia.*

WEST VIRGINIA

Better utilization of time needs to be made. Provision should be made for the purchase of more equipment so that the amount of time pupils spend waiting to be transported, as well as in transit, can be reduced.—ROY W. WALLER, *state director, school transportation and driver education, Charleston.*

WISCONSIN

Comprehensive school bus driver training programs should be organized. The training should be supervised on the state level, and local school authorities should assume the responsibility of carrying out the program. Experience has shown the need for strengthening the compulsory insurance requirements for school buses.—THEO. A. SORENSON, *supervisor of school transportation, state department of public instruction, Madison.*

WYOMING

An accounting policy that is practical for all school transportation systems should be worked out. Our needs are statewide statistics. From these a formula for operation and maintenance might be developed for use in distributing state aid. Such a study now is being carried on under a directive from the 1957 legislature.—VELMA LINFORD, *state superintendent of public instruction, Cheyenne.*

After Two Decades, Safety and Economy Remain Central Themes of School Transportation Conferences

WASHINGTON, D.C. – That nationally organized efforts on behalf of pupil transportation are being continued and intensified is evident from a look at the current calendar of organizations active in that field.

For September 21-24, for example, there is scheduled the third national conference on driver education, to be held at Purdue University, Lafayette, Ind. Sponsors are the national commission on safety education of the National Education Association, other N.E.A. units, and the Council of Chief State School Officers. The stated purpose of the meeting is "to review and revise standards recommended at past national conferences and to consider any other developments in driver education about which recommendations might be made."

Following the request of the Council of Chief State School Officers, the commission also will administer another national conference on school transportation, in 1959. While the date and place for the sessions have not been determined, two regional meetings have been held in preparation for it, attended by state supervisors of school transportation from the northeastern and southeastern states. Two more regionals are planned this fall for the central and western states. Previous conferences were held in 1945, 1948, 1951 and 1954.

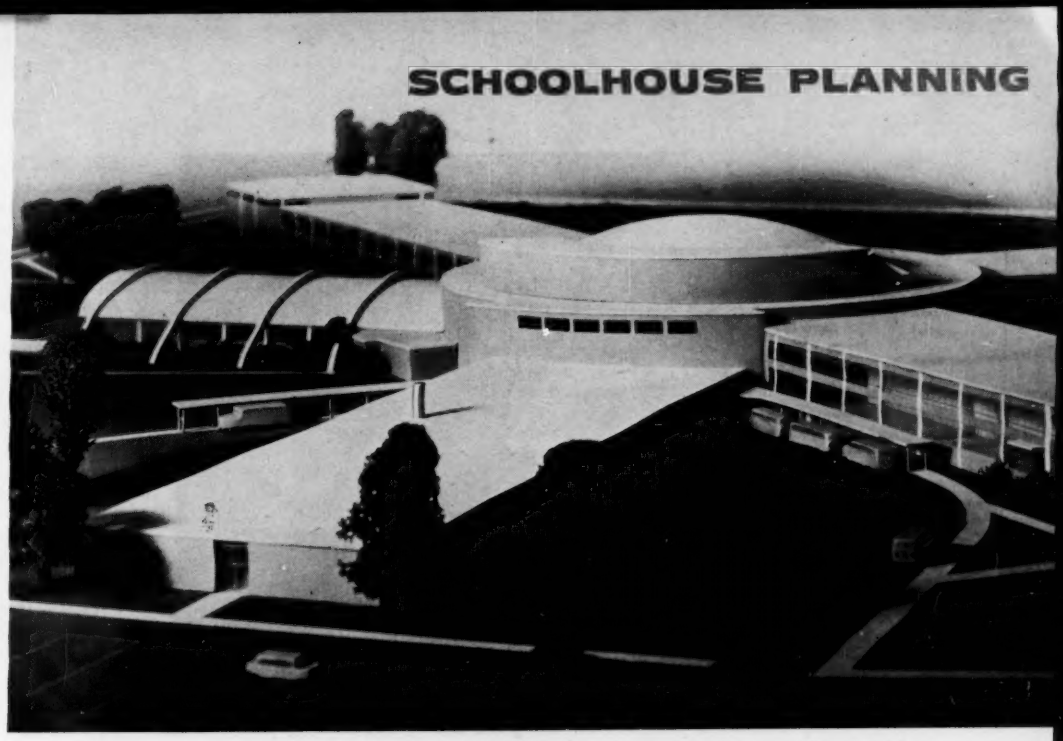
Further evidence of work done by various national committees during the last two years was the publication, in June, of a 60 page report by the Council of Chief State School Officers. Titled "The Responsibilities of State Departments of Education for Pupil Transportation Services and School Plant Services," almost two-thirds of the booklet is devoted to school transportation. It sets forth general objectives, lists 10 criteria for determining the responsibilities of state departments of education, and outlines a dozen areas of state department responsibility in the organization and administration of services in this field.

Even before the series of four national conferences on school transportation, back in 1939 a national conference on *school bus standards* was held at Columbia University—upon invitation of the university and with the approval of the National Council of Chief State School Officers. Discussions were pointed toward the developments of a set of school bus standards, which subsequently were recommended for adoption as a pattern for state standards.

Revisions in the standards were made by the national conferences of 1945, 1948, 1951 and 1954. After the last named meeting there was published the 1954 revision of "Minimum Standards of School Buses," which continues as the official guide in this field.

Because the work of the national conferences has been entirely voluntary, these minimum school bus standards have no legal basis. They are simply the recommendations of educational representatives who have given much thoughtful consideration to the problems. The standards can be implemented when adopted and enforced by the individual states. #

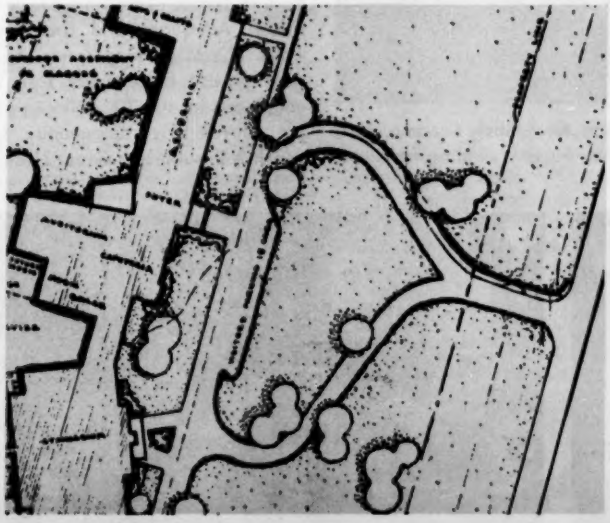
Loading zones illustrated on this page designed by Childs & Smith, architects and engineers, Chicago.



Bus concourse at prosposed West Maine Township High School, Des Plaines, Ill., will be convenient to all units and assure control of passengers and equipment from central core.

Plan Wisely for Loading Zones

While bus traffic is presently served by the main entrance of the first unit of Red Oak School, Highland Park, Ill. (above), a central bus concourse will be provided as classroom wings are added.



A one-way drive leads off deceleration lane of a heavily traveled, two-lane highway near Lincoln-Way High School, New Lenox, Ill. Bus loading and unloading take place along the entire "landing strip" in front of building. Buses leaving the driveway enter highway via acceleration lane.

MODERN school planning is not complete if it does not provide adequately for safe, smooth operation of vehicular traffic. From the very outset, facilities for bus loading and unloading, and provisions for bus maintenance, must be considered as an integral part of the construction program. Provisions must be made also for the safe "docking" of riders arriving at school in automobiles.

Today's complete schools have these six conveniences: (1) a safe loading zone (no drives or parking areas to be crossed, no parallel parking); (2) an area reserved for buses only; (3) weather protection; (4) a central location; (5) central control for administration and supervision, and (6) a convenient waiting area for early arrivals and late departures.

The evolution of facilities to meet present multiple traffic requirements can be plotted almost chronologically

Overhead protection is provided all along the arcing bus loading platform at King Philip Elementary and Junior High School located in West Hartford, Conn.

Above: Recessed in the 75 foot long canopy of Bon Air School, Kokomo, Ind., are lights used to illuminate the building approaches for any evening functions.

CREDITS: The West Hartford school was designed by Ebbets, Frid & Prentice, architects of Hartford. Other schools pictured on this page were designed by Perkins & Will, architects-engineers, Chicago and White Plains, N.Y.

by an examination of schoolhouse construction since 1952. Prior to that time, with small schools located near the center of student population, provisions for bus loading were relatively simple. A single driveway to the main entrance usually took care of the situation. If funds were available, a protective portico and a foyer were provided. More recent developments are illustrated on these pages.

In some districts controls are needed also for parents' cars bringing children not on the bus routes and for other private autos. Here and there schools have provided off-street driveways that permit cars to enter the area separately from the buses and to park at a secondary dock. Thus dismounting children do not have to cross wheeled traffic lanes, and the cars can depart without interfering with the buses.

Some schools with public address systems permit the children to remain in their classrooms, gymnasium or cafeteria until their bus arrives and is announced over the loud-speaker. Similarly, a supervisor with a portable microphone can call children whose parents' automobile is waiting. This avoids driveway blocking during the period it takes for the parent to make visual contact with the child.

School children who have become accustomed to systematic and orderly arrivals and departures will experience little difficulty during inclement weather; otherwise serious dangers might arise.

Bottom, left: There is space for a maximum number of buses and cars in this loading area of Westwood School, Woodstock, Ill. It parallels the longest side of the building, faces the road. A separate entrance accommodates the smaller riders. Shelter given by the wide cantilevered roof permits the dock to double as play area for games. Below: Adequate and roomy driveways, liberal parking space, and the wide portico help assure safe traffic conditions for the 300 children attending Clover Drive Community School which is in suburban Great Neck, N.Y.

Solving accounting problems

Clearing Accounts Preclude Deceptive School Costs

PAUL L. REASON
Associate Chief, Educational Records and Reports
U.S. Office of Education

RARE, indeed, is the school administrator who has not at some time or other been puzzled by the problem of reconciling the need for valid and reliable cost figures with the need for a simple, functional financial accounting system.

Contributing in no small way to the dilemma are the problems involved in accounting for a general class of school financial transactions that require special handling if an artificial ballooning of receipt and expenditure figures is to be avoided. Unless such transactions are dealt with properly, there is real danger that the same money will be recorded two or three times, and duplications will result in a distorted picture of amounts a district has received and spent in a year.

Such misleading cost figures can be avoided through an expanded use of clearing accounts. As defined in the Financial Accounting Handbook,[1] clearing accounts are used to accumulate total receipts or expenditures, either for later distribution among the accounts to which such receipts and expenditures are properly allocable or for recording net difference under the proper accounts. They are *part* of a fund, not a separate fund, and can be used with any fund.

The use of clearing accounts as exemplified in the working of a typical clearing account operation was illustrated in Part I of this article.[2]

Transactions involved in the proper accounting of funds received from a $10,000 current loan were traced.

Three other typical clearing account operations are discussed here: materials purchased for resale, purchase and sale of securities and abatements of revenue and expenditure.

1. Resale Materials. Items purchased by the school for resale to students present a problem with respect to duplication that is similar to that for current loans. But the way in which the problem occurs is somewhat different from the current loan example.

Let us suppose that the materials are shop materials, such as lumber, paints and varnishes, for use in the instructional shop program. If the transactions of purchase and resale are handled through the regular receipt and expenditure accounts, here is what happens.

At the time these supplies are purchased, the expenditures for them are recorded under the appropriate instructional account. According to the Financial Accounting Handbook, this would be in the 200 series, specifically, Account 240, Teaching Supplies.[3] When the materials are resold to the students, receipts from the sales are recorded under the appropriate receipt accounts. At this point, there is the first duplication in the receipt accounts because the money has already been received and recorded.

As more materials are purchased and the program continues to operate, the expenditures for such materials, too, are recorded under the regular expenditure accounts. This results in a further duplication of expenditures recorded for teaching materials. Every time an entry is made in the receipt or expenditure accounts for the sale or purchase of materials intended for resale to students, there is ballooning of the total receipt and expenditure figures.

The resulting receipt and expenditure picture is distorted because these expenditures do not represent actual costs to the school district. They are costs to the individual students or to their parents but are not a cost to the public any more than the clothes or the shoes the children wear to school are a public cost. For this reason, it is hardly fitting to include them in per pupil costs.

If, instead, transactions connected with the purchase and resale of materials are handled through clearing accounts, the gross receipts and expenditures for such materials are removed from the regular accounts. This procedure ensures that only the real cost to the school district, if any, gets into per pupil cost figures.

Specifically, the procedure consists of running all purchases and sales of materials through Account 1820, Materials for Resale. At the end of the year, this clearing account is balanced and closed out to the regular receipt and expenditure accounts. If at that time the money received exceeds the money paid out, the net receipt or profit is recorded under the appropriate regular receipt account, Account 14-c, Net Receipts From Revolving Funds or Clearing Accounts.

On the other hand, if the money paid out exceeds money received, the net expenditure is closed out to the appropriate regular expenditure account. In this case (since the materials in question are lumber and other teaching supplies for the instructional shop program) this is Account 240, Teaching Supplies. The net expenditure represents the actual cost to the school district and is the only part of the operation that finds its way into per pupil cost figures. There is no duplication or ballooning of either the receipt or expenditure totals.

2. Purchase and Sale of Securities. When a school district purchases U.S. government bonds or similar securities, the purchase is not actually an expenditure of money, for the school district has not purchased any goods or services with the money. It has actually *exchanged* one asset, namely, a certain amount of cash, for another asset of the same general type, namely, the security. Since the security is readily convertible into cash, it is usually regarded in the same light as cash so far as assets are concerned.

[1] Reason, Paul L., and White, Alpheus L.: Financial Accounting for Local and State School Systems, Standard Receipt and Expenditure Accounts. U.S. Government Printing Office, 1957. (U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series, Handbook II, Bulletin 1957, No. 4.) Developed cooperatively with the American Association of School Administrators, the Association of School Business Officials of the United States and Canada, the Council of Chief State School Officers, the Department of Rural Education of the National Education Association, and the National School Boards Association.

[2] The Nation's Schools, July 1958, p. 50.

[3] Clearing Account 240, and additional account numbers used in subsequent paragraphs, are the numbers assigned to the respective accounts in the total classification of accounts developed in Financial Accounting for Local and State School Systems.

The purchase and sale of securities affect the financial condition of the school district only insofar as any profit or loss results from the sale of the security. Here, again, clearing accounts make it possible to have a complete accounting for the purchase and sale of securities without bringing such transactions through the regular receipt and expenditure accounts and thus inflating the total figures.

The procedure for the handling of securities is somewhat different from the two previous cases we have discussed. In this instance, when a security is purchased, the money paid out for the security is recorded under Clearing Account 1550, subaccount 1550-b, Money Paid Out. When the same security is sold, the money received from its sale is recorded under Account 1550, subaccount 1550-a, Money Received. It is here that the procedure begins to differ from the previous examples.

The securities clearing account is *not* closed out at the end of the fiscal year. When a security is sold, any excess of the money received over the purchase price of the security is recorded under revenue receipt Account 14-b, Earnings From Temporary Deposits and Investments.

If any losses result from the sale of a security, the manner of handling the loss depends upon when the security was originally purchased. If the security had been purchased *prior to* the current fiscal year, the loss is regarded as an expenditure and recorded under Account 850, Other Fixed Charges. If the security had been purchased *during* the current fiscal year, the loss is regarded as an abatement of revenue and abated against Account 14-b, Earnings From Temporary Deposits and Investments.

3. Abatements. These fall into two categories: (a) abatements of revenue and (b) abatements of expenditure. The Abatement clearing account, No. 1920 in the Financial Accounting Handbook classification, is used as a holding account under which to accumulate the two categories for later posting to the appropriate regular receipt and expenditure accounts.

Abatements of revenue. These are refunds paid back on revenue received during the current fiscal year. They are refunds or rebates made by the school district back to the original source of any previously received revenue. They may be refunds of taxes, refunds of state or federal grants or subventions, refunds of tuition, refunds of rent, refunds of money previously received through error, or other similar items. These refunds reduce the amount of revenue available to the school district. As they are paid out, they are recorded under Clearing Account 1920, Abatements. At the end of the accounting period, the abatements of revenue are totaled for the respective revenue accounts affected and these totals are then deducted from the affected accounts.

To illustrate, suppose a school district has agreed to educate, during the year, a specified number of children from a neighboring district and has received the agreed tuition. However, before the year is over, some of the children leave school and the receiving district returns a part of the tuition to the paying district.

INFLATES REVENUE FIGURE

If this refund is treated as an expenditure, it can be seen that not only will there be an inflated total expenditure figure for the year, but there will also be an inflated revenue figure as well. This is because the receiving district actually does not have the refunded portion of the tuition to use for its educational program. So, instead of treating this refund as an expenditure, it is recorded under Clearing Account 1920, Abatements, subaccount 1920-b, Money Paid Out. At the end of the accounting period, this refund would then be deducted from the appropriate regular receipt account under which the total tuition receipt had been first recorded—in this case, Account 80-a, Tuition Received From Other School Districts in the State. Account 80-a then reflects the true revenue from this particular source and the refund has not blown up the total expenditure figure.

Abatements of expenditure. These are refunds received on expenditures made during the current fiscal year. They are refunds or rebates to the school district of a part or the whole of a previously made expenditure for reasons such as overpayment, the sale of replaced equipment (not junk) in lieu of trading it in on the purchase of new equipment, discounts on quantity purchases, the sale of property closely following its purchase (for example, sale of excess land which had been purchased in order to obtain the land desired), and minor collections for loss of property not covered by insurance.

As such refunds are received, they are recorded under Clearing Account 1920, Abatements. At the end of the accounting period, the abatements of expenditure are totaled for the respective expenditure accounts and deducted from the totals of each of the expenditure accounts affected.

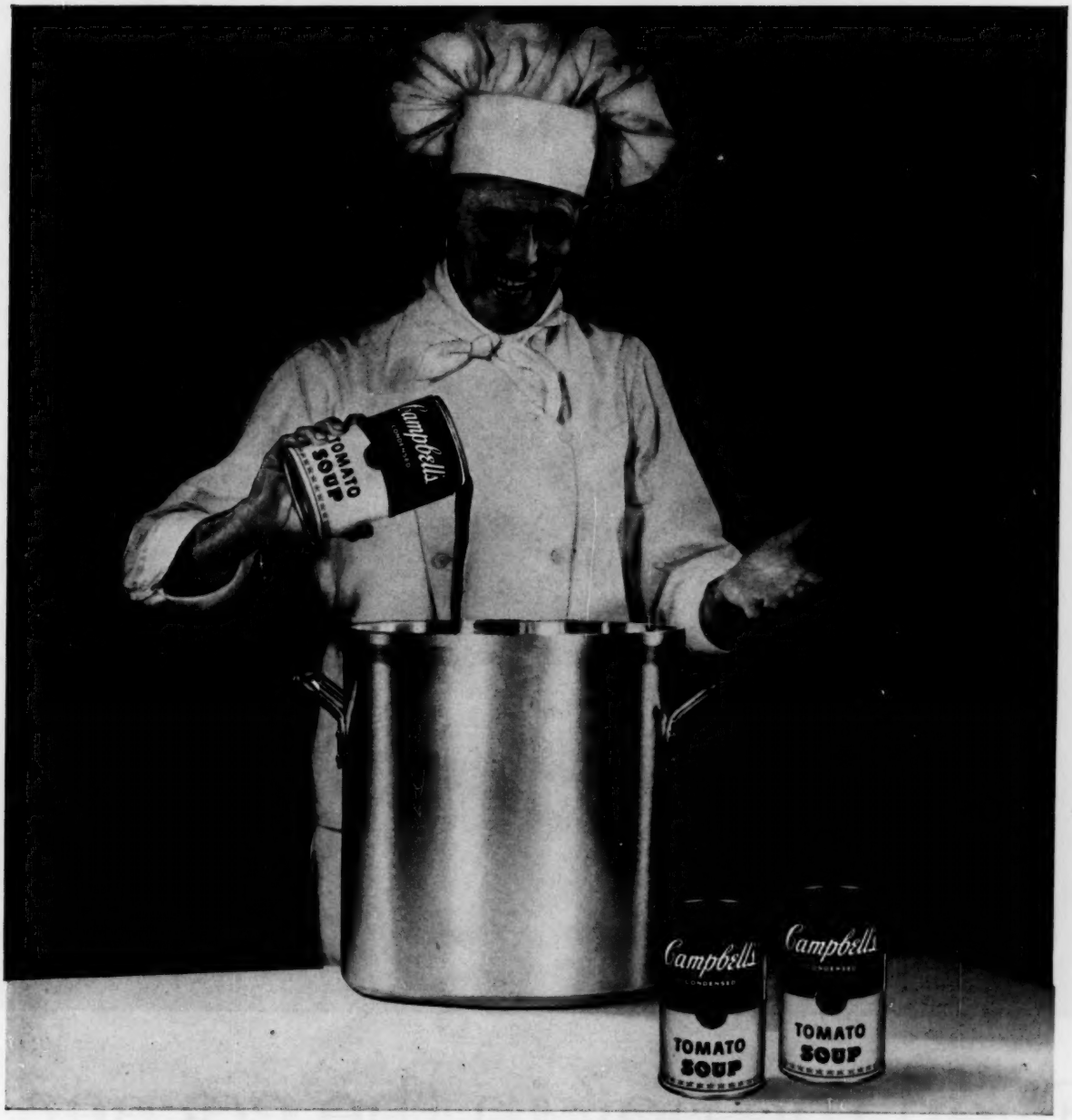
To illustrate, suppose a school district purchased a number of desks for $5000 as replacements for desks on hand. The old desks are not turned in but, instead, are sold for $1000. At the time the new desks are purchased, the $5000 is recorded under the appropriate expenditure account, which in this case happens to be Maintenance of Plant, Account 730, Replacements of Equipment. When the old desks are sold, the $1000 received from their sale is recorded under Clearing Account 1920, Abatements, subaccount 1920-a, Money Received. At the end of the accounting period, the $1000 from the abatement account is deducted from the replacement account, 730. This leaves $4000 remaining in Account 730 as the actual replacement expenditure for the new desks.

Whether abatement accounts are necessary depends largely upon the kind of accounting system a school district is using. In some school districts it might be more feasible to debit or credit the appropriate receipt and expenditure accounts as the abatements occur without accumulating them under an abatement account. In a great many school districts, however, the accounting system employed makes it undesirable, and not infrequently impossible, to abate an expenditure or revenue account directly at the time a refund occurs. Since in such instances the alternative to the clearing account treatment is to record abatements of expenditure as receipts, and abatement of revenue as expenditures, this alternative can result only in deceptive receipt and expenditure figures for the school district.

IN REVIEW

The specific clearing accounts needed by any school district will depend primarily upon the activities of the school district and the system of bookkeeping employed. Certain activities that may be under the board's control in one district may not be under the control of the board in another district. Some of the clearing accounts in the classification shown may not be needed with the double entry system of bookkeeping, but would be needed with the single entry system in order to show net receipts or expenditures.

Some school districts, because of the scope of activities, will need more accounts than are shown in the classification, while others will require fewer. Accounts can be selected from the classification and additional accounts and subaccounts established as needed. When used as described in the new Financial Accounting Handbook, clearing accounts can be valuable aids to obtaining, with a minimum effort, valid financial data concerning the cost of operating a school district. #



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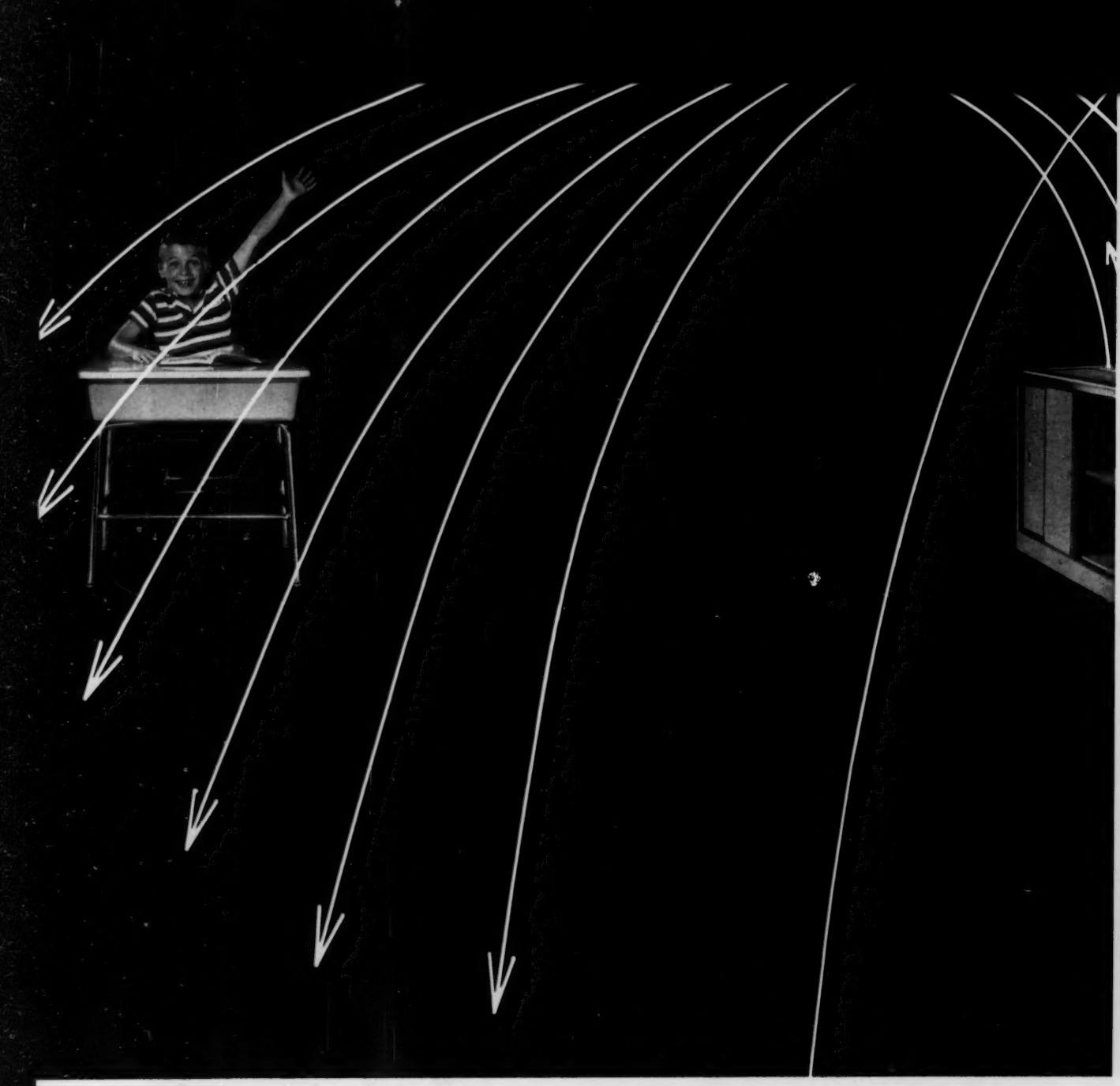

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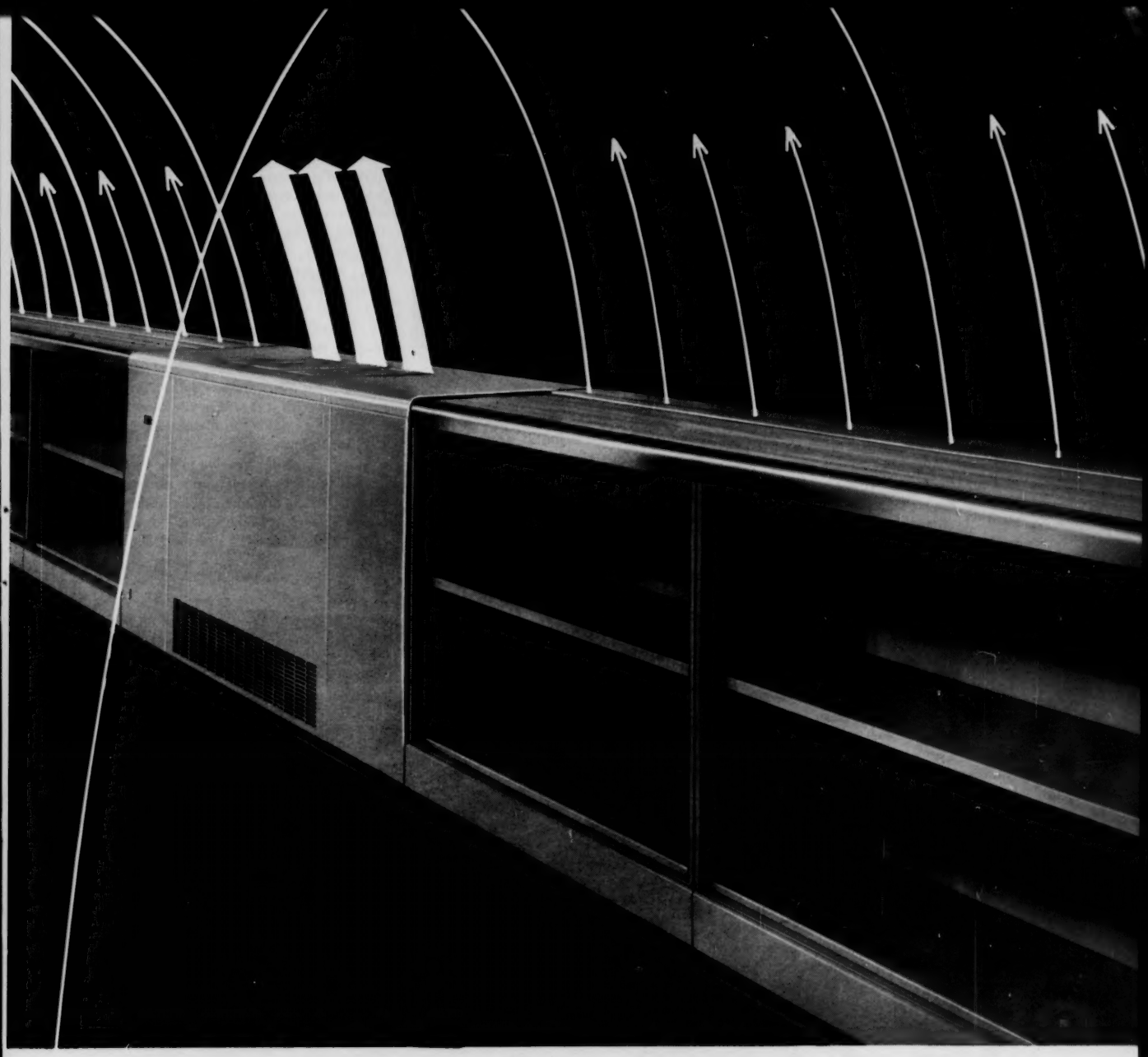

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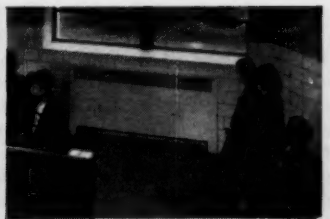

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FREDERICK J MOFFITT

THE HOT MONEY PROJECT

FOLLOWING THE strident demand for more math and science teaching for immature minds, I was hard put to it to find some suitable project with which to inflame the overactive imaginations of my little charges. My search for such a project was finally rewarded by an article published in "The Arithmetic Teacher," an excellent brochure of the National Council of Teachers of Mathematics.

The article suggested that the kiddies study ancient and modern coins, old account books, and similar items. "Here is an opportunity to combine arithmetic, social sudies, and language," reported the enthusiastic author. It must be added that as the project developed it was also helpful in economics, athletics, handcraft, gamemanship and distributive education. It seemed to have some relationship to moral and ethical values, as well, but, unfortunately, they were the wrong kind.

The children were requested to bring old coins, bills and shinplasters to class. I knew this would in nowise anger their parents, who suffer silently from similar daily requests from the superintendent's office. The little ones responded wholeheartedly. Eager little Putrid brought a supermarket cart full of Confederate money, trading stamps, the family mortgage loan book, and three unopened piggy banks. Horace produced Liberty Bonds and Christmas Clubs. Many family budget accounts were involuntarily contributed by families of the class, but the most interesting exhibit was an old account book discovered by Fanny, whose grandfather made a fortune out of a drugstore in 1888. From this book, the class learned many medical terms, as well as information on biological devices and patent medicines—facts which, I doubt not, will serve them well in their future nature study.

There were other exciting project outcomes. From little Mike, whom I had hitherto regarded as a complete failure in arithmetic, we learned a card game in which pennies and nickels changed hands at a rapid rate. Because of Mike's amazing skill at this game, I was forced to contribute rather generously. But I pointed out merrily that one of the important characteristics of money is its portability. Mike also taught us some valuable lessons in measurement, where coins could be thrown at a crack in the floor and collected by the most accurate measurer. This game was also won by Mike. I am afraid I never realized his mathematical potentialities. The little fellow showed a keen grasp of Gresham's Law as I discovered later when, searching for parking money, I found only street car tokens and promissory notes in my pocket.

Unfortunately, before the hot money project could be thoroughly evaluated, our supply of coins mysteriously vanished. It was not until I received a letter of gratitude from the man who runs the corner candy store that I realized the children had found hidden values in the project.

As is always true of good projects, I learned a great deal more than the children, and I confiscated enough coins to purchase a railroad ticket for a much needed vacation. The project certainly increased our general understanding—but as for arithmetic, I do not know.

« »

TEACHER MANAGEMENT

BECAUSE OF THE preponderance of gals in the teaching profession, many of the dealings of a school superintendent are, perforce, concerned, happily and unhappily, with the female of the species. It is a brave, foolish and prevaricating school executive, however, who claims that he knows much of anything about this fascinating and dangerous subject or how to handle same. Until the age of 50, the astute administrator uses a trial-and-error method, never very successful. After that, he gives up entirely.

But now modern psychology has come to the rescue. Dr. Phyllis Brown, an editor of the Research Institute of America, has revealed some of the secrets for managing this interesting and provocative section of the human race. If the doctor is right, the job of school administration will become much less complicated. Let it be understood clearly, however, that Chalk Dust, after many years of failure with this problem, assumes no responsibility when the rules do not work.

1. Never, never tell a woman that she is illogical, says Dr. Brown. Of course, you can logically assume that she is illogical, but by thinking illogically she arrives at a clearer destination by a faster detour and fewer parking tickets than any mere man. Telling her that she is illogical is not a logical way to handle the situation.

2. A woman needs much more high-pressure praise and low-pressure correction than her male counterpart, asserts Dr. Brown. If you haven't already discovered this fact, you dope, you should seriously consider leaving school administration for the janitor's job. How he gets away with it, I will never know.

3. Never yield to a woman's tears, says our Informant. And after you have yielded, you brute, resolve never to yield again. Dr. Brown says under no circumstances to tell a woman, "Go wash your face and you will feel better." Such advice may be meant to save her face but, by golly, it won't save yours.

4. In all your dealings with women, be impartial. If you can't be impartial, be impersonal; if you can't be impersonal, be impervious. If you can't be—oh, well, what's the use, how did you ever get involved in this particular argument in the first place?

5. In dealing with brainy gals, always praise their beauty. With beautiful specimens, praise their brains. Where neither brains nor beauty are evident, what makes you think you are so well stacked yourself?

6. In telling off the female, make your admonitions and directions specific and clear. If you must have definite rules, repeat them repeatedly and post them in a prominent place, after which it is probably the best course of action to throw the prominent place in the ash can.

« »

PUBLIC RELATIONS

REALIZING that the young superintendent was daily getting more discouraged over his public relations program, the president of the board sought to cheer him up. "Talk right back to these loud-mouths," he advised. "Why, only yesterday a taxpayer complained to me that you were not fit to live with pigs. I defended you vigorously and said you were."

« »

NO SURE THING

THE time had come when the faithful old school janitor needed to be replaced by a newer model. With considerable embarrassment, the superintendent undertook to break the news to the old man. In tactful terms he extolled the glories of social security, retirement, pension and a testimonial dinner. The janitor registered surprise, disbelief and indignation. "Durn it all," he said, "when I took the job in 1890, they promised me it would be permanent."

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wire from Washington . . . . . By EDGAR FULLER

Compromise Education Bill Approved by House Committee

► July 2 was a busy day for the House committee on education and labor. The full committee voted 23 to 3 approval of the omnibus bill cited as the National Defense Education Act of 1958 (HR-13247). This bill is a compromise between the Administration's postsputnik bill and a similar bill introduced by Representative Carl Elliott of Alabama. Among the 23 positive votes were 14 Democrats and 9 Republicans.

H.E.W. Secretary Marion B. Folsom immediately led to the White House a delegation including several Republican congressmen, seeking support from President Eisenhower. Minority Leader Martin announced that he thought the bill would pass the House in this session, but the President was expected to give once more the sort of qualified approval that would justify Republican votes against the bill if it reaches the floor of the House.

On the same day the Bailey subcommittee approved the Murray-Metcalf bill (HR-10763) with all but Republican Representative Lafore of Pennsylvania concurring. This subcommittee also sent to the full committee a bill introduced by Representative Roosevelt of California to authorize federal support for area vocational schools. This is similar to Title 10 of the original Elliott bill, and is distinctive in that it will probably have the support of Chairman Graham A. Barden.

► Following is a brief description of the Administration-Elliott omnibus bill as approved by the full committee:

Declaration of policy. Title I reaffirms the principle that the states and local communities have and must retain control over and primary responsibility for public education. It then says that the national interest requires federal assistance ". . . to education for programs which are important to our defense." A secondary reason is ". . . to ensure trained manpower of sufficient quality and quantity to meet the national defense needs of the United States." The committee has selected programs it believes meet these purposes best, and HR-13247 proposes federal subsidies for them.

National defense scholarships. The bill would authorize $17½ million for each of four years to provide scholarships for persons entering college for the first time. Each scholar would receive $500 each academic year plus an additional $500 in cases of special need. The U.S. commissioner would check on each scholar to ensure that he devotes essentially full time to educational work leading to a bachelor's degree, maintains satisfactory proficiency in his studies, and does not receive assistance from other federal sources.

State scholarship commissions would select the scholars in accordance with objective tests and other measures of aptitude and ability, giving special consideration to those with superior capacity or preparation in science, mathematics or modern foreign language. Each state commission would submit a state plan. The commissioner would allocate the scholarships according to the relative population of the states of ages 18 to 21, inclusive, and would pay for state administration amounts he determines necessary.

Loans to college students. The bill would authorize $40 million for the first year and $60 million for each of the next three years for loans to be made by higher institutions. Federal funds would be allocated according to the relative number of full-time college students enrolled in each state, and would be supplemented by institutional funds amounting to at least 25 per cent of the federal amount.

Students could borrow $1000 each academic year with a $5000 limit for any student over the course of his undergraduate work. Loans would be made on strict terms. A student would have to prove need and be capable of maintaining good standing in the course of study selected. He would repay the loan over a period of 10 years beginning one year after leaving college, with 2 per cent interest until the payments are due and 4 per cent thereafter. Death of the student would cancel liability.

Between June and September in 1966 each institution would repay the federal government its share of the capital fund and would liquidate the program. An institution may borrow its 25 per cent share from the federal government at an interest rate one-fourth of 1 per cent above the federal borrowing cost.

Science, mathematics and modern foreign language assistance. The bill provides $60 million for each of four years for equipment and minor remodeling of facilities used for teaching of science, mathematics and modern foreign languages in public elementary and secondary schools. Federal funds would be allotted on a sliding scale according to relative personal income by states and school-age population, with a limit of one-third of federal funds for the wealthiest state and two-thirds for the least wealthy state. After the first year there would be 50-50 matching by the states.

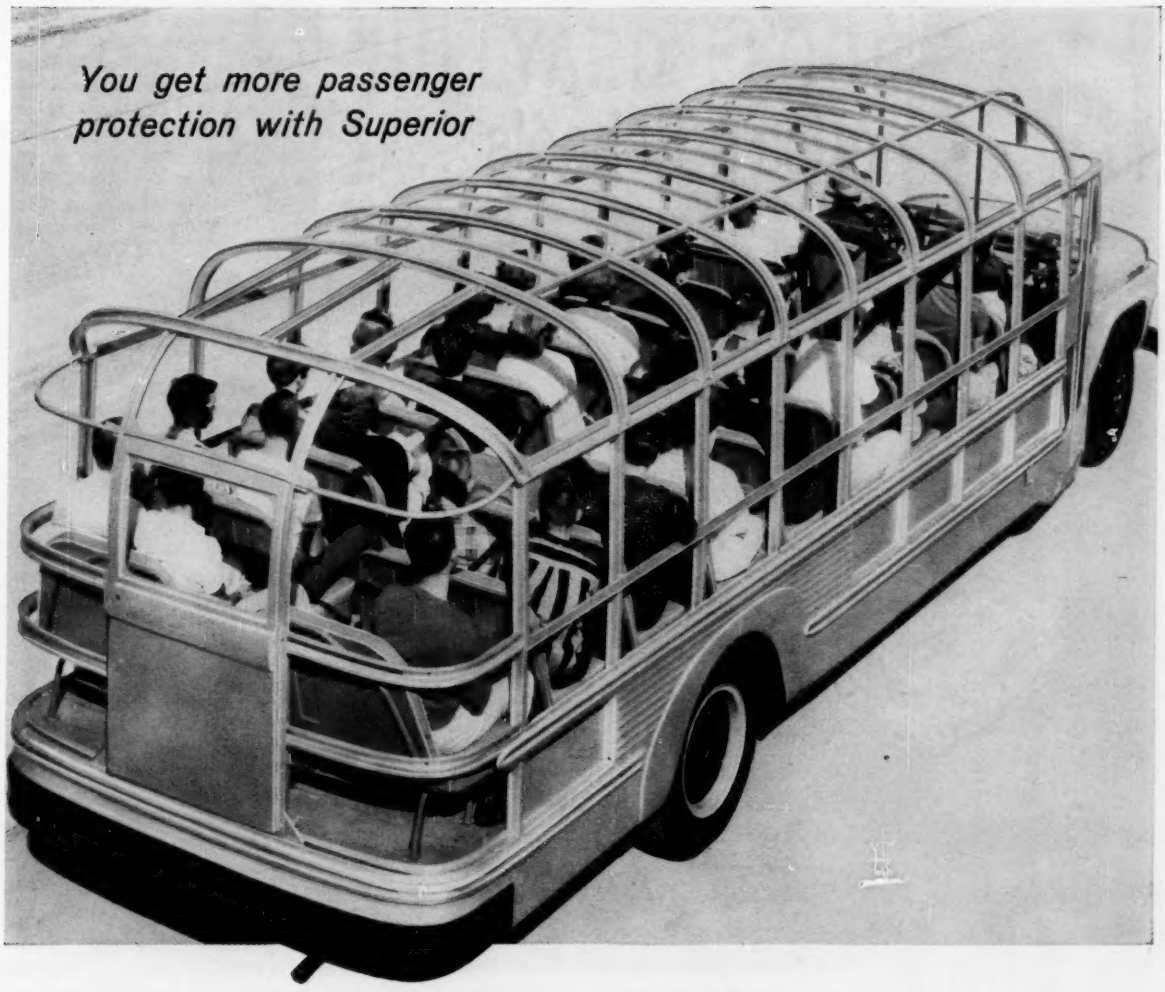
Each state would make a state plan for approval by the U. S. commissioner. State eduational agencies would receive $5 million annually for administration of the state plans and for expansion or improvement of science, mathematics and foreign languages. Funds would also be allocated on a school-age population basis.

Language development. The bill provides up to $4½ million per year for four years for language institutes, language centers, research and studies in institutions of higher education. The U. S. commissioner would make joint contracts for the institutes, paying all or any part of the cost from federal funds. The commissioner would contract for establishment of language centers with 50-50 matching by the institution. The commissioner could conduct research and studies or allocate funds to institutions for these purposes without matching.

Expansion of graduate education. The bill provides for 1000 fellowships the first year and 1500 for each of the next three years, to be awarded by the U. S. commissioner for use in new or expanded graduate school programs approved by him according to standards set forth in the law.

Fellowship stipends range from $2000 to $2400 a year with $400 a year for each dependent. In addition, $500 to $2500 would be paid directly to the institution for each fellowship holder for each year, constituting that portion of the cost to the institution reasonably attributable to each fellow, with the commissioner fixing the amounts. The commissioner would have authority to check on students' work.

(*Cont. on p.* 58)



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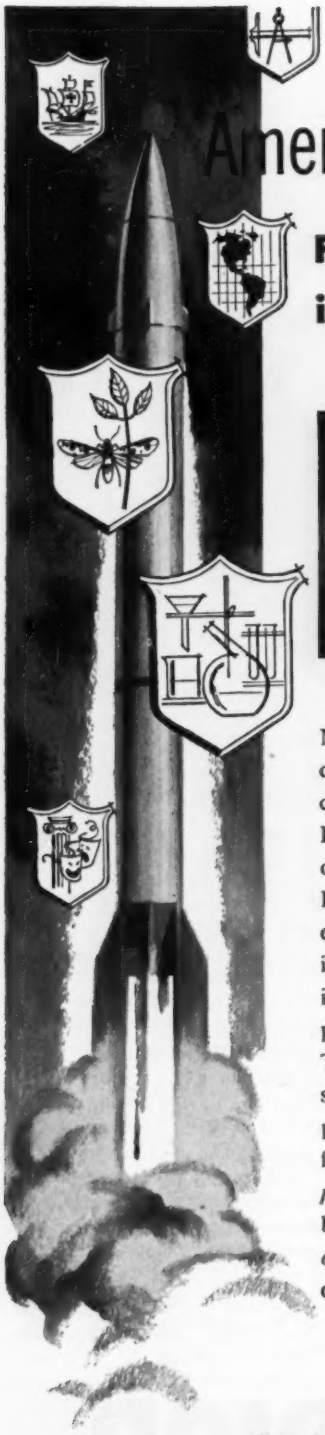

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Guidance, counseling and testing. The bill provides $15 million for each of four years in grants to be expended by state educational agencies for programs of testing, guidance and counseling or to be granted to local boards of education for similar purposes. Allocation is on the basis of school-age population. The funds would be expended under a state plan. After the first year, states would match 50-50.

Institutes in guidance and counseling could also be established in higher institutions by the U. S. commissioner under joint agreements. Allocations may total $6 million for each of four years, paid for the reasonable cost incurred in providing the summer or regular session institutes contracted for. Institute courses would cover counseling and guidance of students at the secondary school level with emphasis on the gifted.

The bill also provides for payment of a stipend of $75 per week for each student and $15 per week for each of his dependents by the commissioner. These provisions are similar to those already in effect in the National Science Foundation for similar institutes.

TV and other mass media. The bill provides $2 million for each of four years for studies, surveys and research in the mass media by the U.S. Office of Education under grants or contracts made by the commissioner with state or local educational agencies or institutions of higher education. It also authorizes provision of technical assistance to these agencies by the Office of Education.

State statistical services. The bill provides for a four-year program to improve and strengthen the adequacy and reliability of educational statistics provided by state and local reports and records. There is no definite appropriation authorized and there is a requirement of 50-50 matching by the states from the beginning of the program. The limit is $50,000 to any one state in one year. State plans must provide new or expanded programs in order to qualify.

Federal science

► The President's scientific adviser, James R. Killian Jr., is said to be nearly ready to announce a new program for the federal government in the field of science. Most scientists believe that the United States has not yet been organized for a science race with the Soviet Union, and that administrative structures controlled and financed entirely by the federal government must be established. No university or existing organization can compete in the scientific race involving such multimillion dollar equipment as oceanographic ships, atomic accelerators, and vehicles to explore outer space. Such scientific advances are imperative in national defense policy. #

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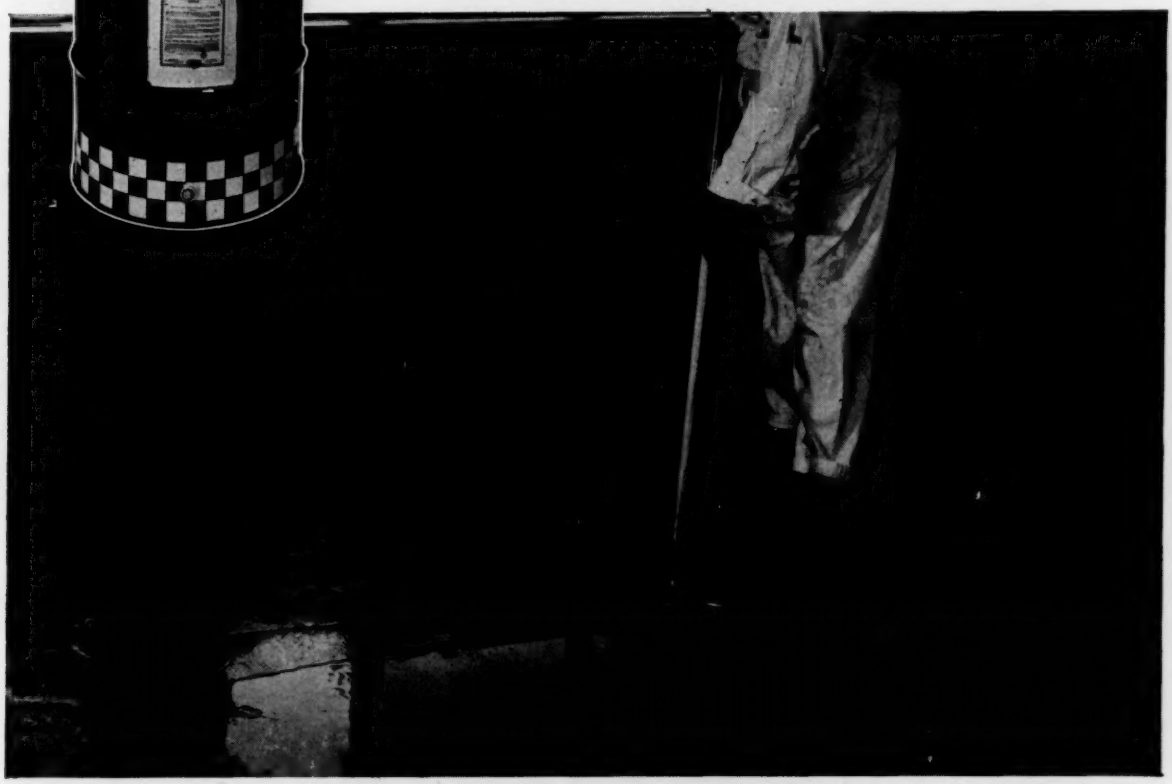

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TEACHERS CELEBRATE

(*Continued From Page* 32)

right to express his opinion on education."

The T. C. dean quickly continued: "Our schools may be pretty good at turning out technical scientists, but we are terrible at turning out people who can think scientifically."

Another specter that hovered over the meeting halls was Education à la Russe.

Oliver J. Caldwell, assistant commissioner of international education in the U.S. Office of Education, and arranger of the new program of exchange visits between school administrators of the U.S.S.R. and the U.S.A., told the Educational Press Association at a Tuesday luncheon:

"Education is a matter of profound concern to the Soviet people at the grass roots, I found. While policies are dictated at the highest level by the Communist party and while local leaders can't conceive of not carrying out these policies, parents want their children to have the best in education. On the collective farms, especially, the farmers through school board and P.T.A. possess the authority to erect buildings and assume charge of nonacademic matters."

GIFTED HAVE THEIR DAY

Not adulation—that's strictly for Letter Man and Big Wheel—but admiration may, perhaps, be in store for the adolescent Egghead one of these fine days.

Gifted children had a whole day at Cleveland—not in person but on paper and platform—and Teachers College spokesmen and others saw in the decline of anti-intellectualism in America the possibility that the Head End Kids may yet win the respect of their peers. Studies are in progress at a Brooklyn high school on this topic.

To date the gifted have won the respectful attention of school administrators, researchers and teachers, who are strenuously carrying on varied experiments at various grade levels in every section of the country. These were reported on tentatively.

THE HUMBLE ADMINISTRATOR

Humility is not always the badge worn by deans of education or school administrators. Yet in the development of that virtue lies the chief hope of cooperative problem solving in the school system. Leading off a session on the democratic way of school living, Dean Stephen Corey of Teachers College, Columbia, said:

"Schools can only become better as people change and become better. The administrator knows all too little about how professional people change. My own best insights come when I examine myself as I try to change.

"Attempts are being made on us administrators to change, although at a distance and surreptitiously. I must examine the resistances that boil up in me when I realize people are trying to change me. Then I'll know what I am up against in trying to help change my staff."

Steps to take in cooperative problem solving, he said, are: (1) self-dissatisfaction; (2) problem assessment and definition; (3) search for promising practices; (4) cooperative design of an experiment; (5) trial, and (6) appraisal.

DOWN ON THE FARM

Conceding almost to a man that federal aid is essential to their salvation, rural educators at a Monday session gasped in wonder. For there materialized in their troubled midst a messiah, junior grade.

In Congressman Lee Metcalf of Montana, he of rumpled hair, red cravat, and boyish smile, lay their present hope. The co-sponsor of the Murray-Metcalf bill entered quietly, with only white gowned Mary M.

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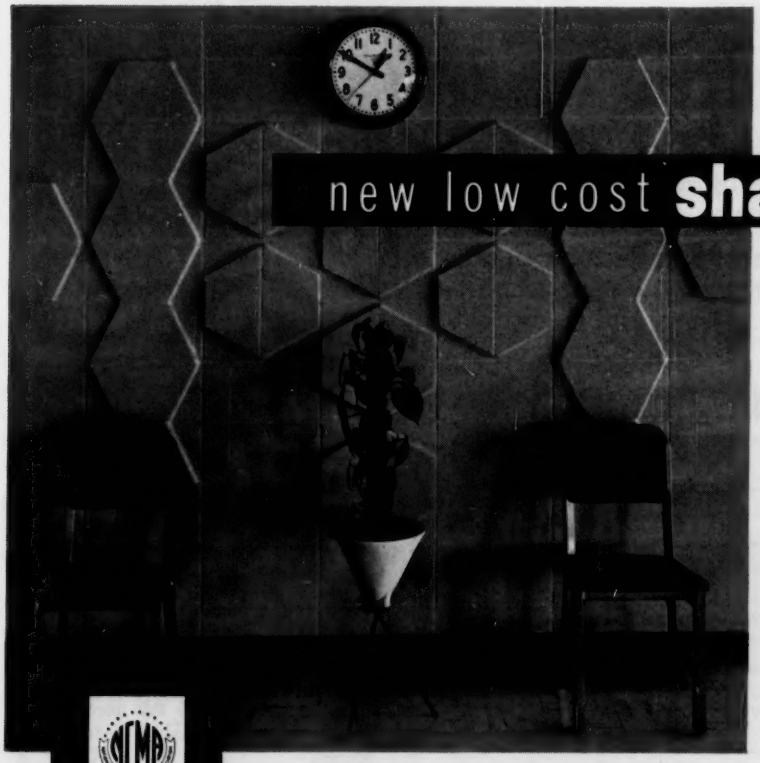

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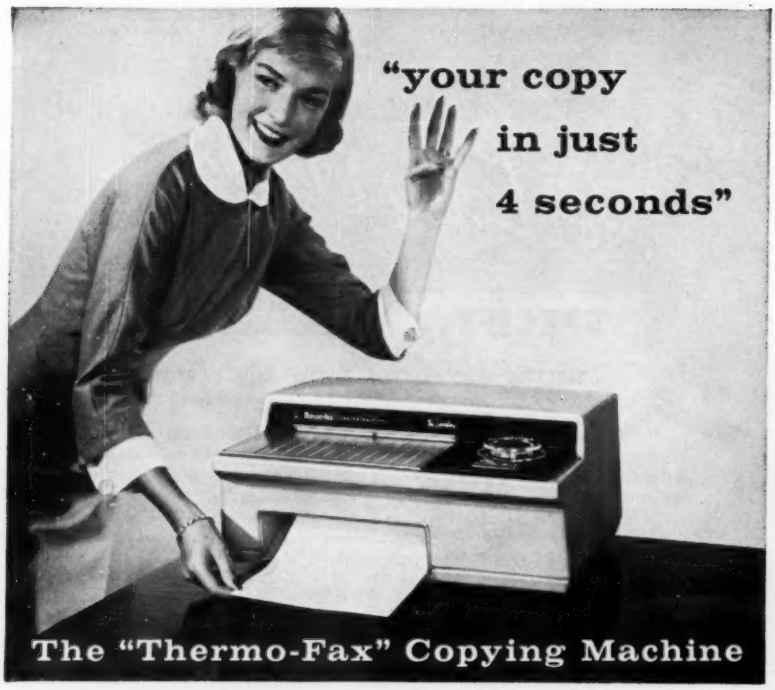

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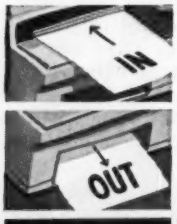

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Condon, Montanan gone Washingtonian, as herald.

Straightway there ensued a tempest that brought to a smashing conclusion an afternoon already spirited.

One man whose clientele views the green pastures of federal aid as more devastating than the present desert wastes was C. Maurice Wieting of the Ohio Farm Bureau Federation, a member of the afternoon's panel.

When Congressman Metcalf was recognized and rose to meet his rural brethren, he lashed out at the Farm Bureau for testifying against his federal aid bill. Mr. Wieting jumped to his feet.

"We know from surveys that Ohio farmers are opposed to federal money for local schools. They want no part of it. If you can convince them that federal aid is the only way out for education, all right. But I'm telling you that they don't think that way now."

The Representative from Montana as quickly rushed to the defense of Mr. Wieting, turning his criticism toward the rural educators and school people in general. Said he:

"The school people have fallen down. They know how many kinds of federal aid the schools enjoy without a vestige of federal control. But they lack the quick courage of this man to stand up and defend their beliefs before the knife and fork clubs. Why?"

Mr. Wieting had previously expressed the same idea. "Abundance is here in the United States. Why do we have inadequate schools, while we spend billions on destruction? Teachers must learn to deal with adults as well as with pupils. They must *teach* people about school needs, instead of beating them over the head."

TEACHERS FEAR TO SPEAK OUT

Supt. Anne Campbell of Madison County Schools, Madison, Neb., had previously testified that if teachers in her part of the Middle West as much as try to spark the farmers to better school conditions, "they will lose their jobs tomorrow."

Other speakers told Mrs. Campbell to get the P.T.A., the Farm Bureau, the Grange, and the Farmers Union to discussing school matters. Warren D. Kullman of New York State proudly related the work of "steering committees" of citizens, who have put over a $20 million building program. Ruth Gagliardo, vice president of the National Congress of Parents and Teachers, cited the accomplishments of lay leadership, teacher inspired.

Mississippi and Alabama rose during the session to tell the wonders of school reorganization, wrought with

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citizen aid. In Mississippi 55 per cent of school funds is now coming from the state. In Alabama it is actually 95 per cent.

The South, having brought to audience consciousness its unmentioned and unsolved problem, Supt. Ralph C. Norris of Polk County, Des Moines, Iowa, the session's presiding officer, asserted:

"The American people are now paying for their sin of 75 years ago. When the South had its whole economy pulled out from under it by the Civil War, we did not step in to help educate the Negro."

A little light on the murky problems of discipline was shed by Supt. Charles Dove of Erie, Mich.

In the Erie schools a teacher committee studied 28 categories of behavior in children of all grades. Tentative conclusions are:

1. Good teaching makes good behavior.

2. Behavior follows growth cycles. Girls in fifth grade and boys in seventh misbehave oftener, perhaps because of emotional upsets resulting from onset of puberty.

3. Behavior is caused, so look for the reasons and try to correct them.

4. If children share in the planning, behavior that contributes to the success of the project has meaning.

Erie teachers also have concluded that children want to behave better than they do. Therefore, teachers should avoid situations that make individual children misbehave. Teachers should set reasonable behavior standards and not depart from them.

WISHING FOR WINNETKA

Looming large in the resolutions, convention addresses, and remarks from the floor was the puny paycheck of most teachers. The consensus was: (1) Starting salaries must be higher; (2) greater recognition must be given to the value of advanced college preparation, and (3) salary advancement must be more rapid and continue for a longer period. Many teachers wistfully mentioned Winnetka, Ill., where salaries are growing to professional levels by regularly spaced leaps and bounds.

Not only must the public be brought to understand the right of the teacher for a decent professional income, the shortage of able teachers, the need for more and better buildings and equipment (all money matters) but, as Supt. Martin W. Essex of Akron, Ohio, made clear on Wednesday:

"Somehow we must find a means of permitting the public, or a segment of the public, to understand the great gamut of individual differences in the learning rate of pupils and in their interest in learning."

Our laws should allow reluctant or incapable learners to leave school earlier than they now do, some speakers contended. Others maintained that high school graduates, even at 18, are still unfit to be allowed to vote.

"Would you like Elvis Presley to be nominated for President?" asked one speaker, restoring Elvis to Page 1 on the newspapers.

Making more shameful headlines was the report of a survey by Dan W. Dodson of New York University, the purport of which is that the longer a child stays in school the more bigoted he becomes.

Dr. Dodson also maintained that superintendents of schools are not "idea men" but heads of great bureaucratic structures; the principal is "a technician who processes the paper minutiae that come over his desk."

PROFESSIONAL STATUS

If school people want to make a real profession out of education, they'd better look for guidance to other professional schools, President Virgil M. Hancher of the State University of Iowa told the delegates.

"Each teacher at graduation," President Hancher maintained, "should

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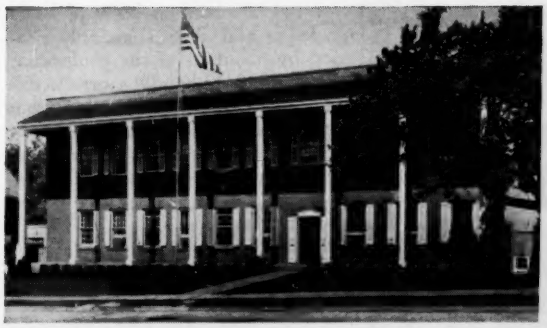

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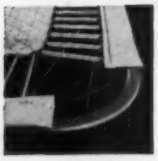

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have: (1) a minimum body of basic knowledge and skills commonly possessed by members of the profession; (2) the ability to handle source materials and to add to that minimum body of knowledge; (3) the ability to think and act effectively in unprecedented situations, and (4) an ethical standard by which his knowledge and skills may be directed."

Teachers at Cleveland took to task the unethical few in their ranks, in a Wednesday discussion group. Those cited were instructors who leave without any notice, the music teacher who chooses students for the band while giving private instrumental lessons in a studio next to the high school, the coach who has been refused tenure and systematically harasses the school system, and the superintendent who falsifies census projections to get more state aid.

In many cases, the panel agreed, a code of ethics developed by the local teachers association would prevent such breaches of conduct. "We must police our own ranks lest we lose the gains we already have made" was the summing up.

Criticism was leveled at the "slackness" of modern American education by Max Lerner, newspaper columnist and professor of American civilization at Brandeis University, Waltham, Mass.

"Education must be made a heroic encounter for teachers and students alike," Mr. Lerner declared. "While searching out talented students, we must at the same time learn to release the springs of devotion and motivation for the majority of students."

NEW OFFICERS NAMED

New N.E.A. officers elected on July 4 are: president, Ruth A. Stout of Topeka, Kan., former first vice president; president-elect (a new designation), W. W. Eshelman, supervising principal, Upper Dublin Schools, Fort Washington, Pa.; members of executive committee, Inez Gingerich, director of elementary education, Enid, Okla., and Francis W. Beedon, instructor in Community College, Muskegon, Mich.

Delegates departed from Cleveland with some colorful memories: the sobbing strings, undulating hulas and a pineapple juice-bar in the Hawaiian hospitality room at the Statler; a new star, No. 49, worn over the ecstatic breasts of Alaskan and Northwest delegates; whole companies of genial Kansans with never a sunflower missing; beefy guys a-saunter in morose plaid shirts, and fanciful flora springing into overnight bloom on thousands of thin dresses as summer temperatures in eastern Ohio pushed up, up, up. #

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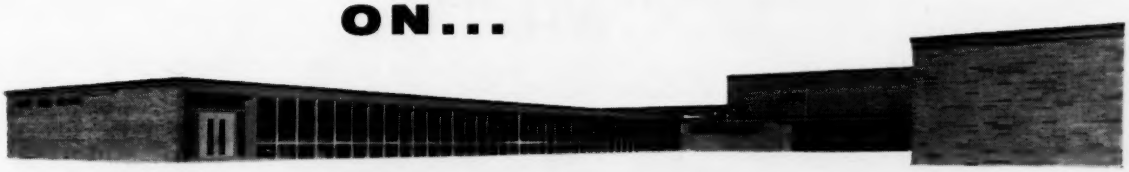

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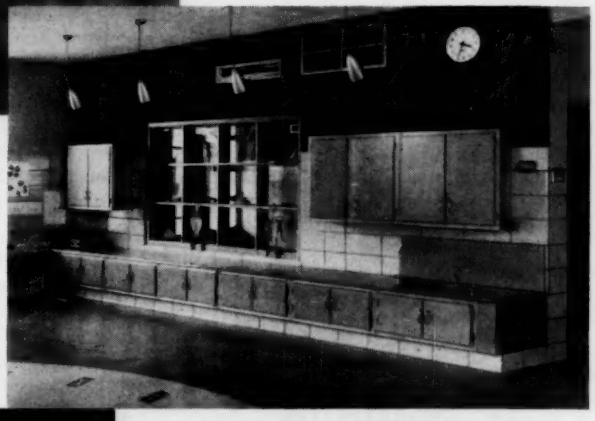

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NEWS IN REVIEW

Discard Stone Age Concepts of Teachers and Teaching, Anthropologist Tells Delegates to N.C.T.E.P.S.

BOWLING GREEN, OHIO.—It is high time that Stone Age concepts of teaching are discarded, an anthropologist told the National Commission on Teacher Education and Professional Standards, an N.E.A. agency, at its 13th annual conference here June 24 to 28.

Margaret Mead, associate curator of ethnology at the American Museum of Natural History in New York, declared that what might have been appropriate 400 years ago may not be suited to the needs of today.

"What we need," Dr. Mead continued, "is a new conception of a teacher who . . . lives in a moving society" and therefore "should move with it."

More than a thousand delegates from the states, China, Puerto Rico, Canada and the Canal Zone attended the conference, which was co-sponsored by seven other national organizations concerned with teacher education.

Conference participants, focusing attention on the theme: "The Education of Teachers: New Perspectives," discussed "professional education"—or "methodology"—courses given in colleges to would-be teachers. The need for improving courses in teacher education and placing high priority on obtaining better trained, more knowledgeable teachers was underscored in 32 group meetings.

The National Association of State Directors of Teacher Education and Certification made a strong endorsement for certification reciprocity among states.

M.S.U. to Organize Institute for Community Development

EAST LANSING, MICH.—The Michigan State University's Continuing Education Service is the recipient of a five-year grant of $756,950 by the W. K. Kellogg Foundation, Battle Creek, Mich.

The grant makes it possible for the university to organize an "Institute for Community Development" to mobilize and focus university resources upon community problems created by a growing and shifting population.

School Food Service Convention in Philadelphia

PHILADELPHIA.—New ways to improve school lunch programs—from nutrition to public relations—will be discussed in old settings as delegates to the American School Food Service Association flock here for the 12th annual convention on November 16 to 20.

The convention fare of panel discussions, general meetings, "Towne Meetings" à la New England, annual House of Delegates meeting, and exhibits will be spiced with "get-acquainted" activities during the first two days. These include a generous helping of regional breakfasts, a reception, a banquet, professional trips to schools, and sightseeing trips to historical shrines.

Meetings will be held at the Bellevue-Stratford Hotel and the Convention Hall in the Philadelphia Auditorium. Mrs. Franklin D. Roosevelt will be among the speakers. She will describe her recent trip to Russia and compare the health services in America and Russia, as well as the general development of education and home life in both countries.

Also scheduled to speak will be two churchmen, a housewife, an assistant county superintendent, a medical doctor, a professor of home economics, a president of a dietetic association, and others connected with school lunches. Mary deGarmo Bryan, editorial consultant, The NATION'S SCHOOLS, will be chairman of the symposium, "Looking to the Future in School Lunch."

Place Emphasis on Quality of Science Teaching

WASHINGTON, D.C.—Improving the quality of science and mathematics education in public schools is even more important than increasing the number of students taking such courses, educators and scientists concluded during a recent two-day conference at the U.S. Office of Education.

The conference was called by Commissioner of Education Lawrence G. Derthick, at the request of the A.A.S.A. and the Council of Chief State School Officers. A summary of the recommendations was released in a pamphlet having the title, "Guidelines for Science and Mathematics."

John B. Cary grade school, Hampton, Va., is installing 36 heat pump air conditioning units in time for fall classes. Units afford heat in winter, provide cooling in summer.

Mrs. Wanamaker Wins Suit Against Fulton Lewis Jr.

GARDEN CITY, N.Y.—Pearl Wanamaker, former Washington state superintendent of public instruction and former president of the N.E.A., won her second suit for libel resulting from a nationwide broadcast in 1956 in which Fulton Lewis Jr. allegedly identified two Communists as brothers of Mrs. Wanamaker.

A jury of 12 men in Walla Walla, Wash., awarded a judgment of $10,000. Mrs. Wanamaker had sought damages of $175,000. Commentator Lewis contended that he confused Mrs. Wanamaker's name with that of Mrs. Margaret Jean Schaddakopf, a Tacoma, Wash., teacher who refused to answer questions about communism before a House un-American Activities Committee.

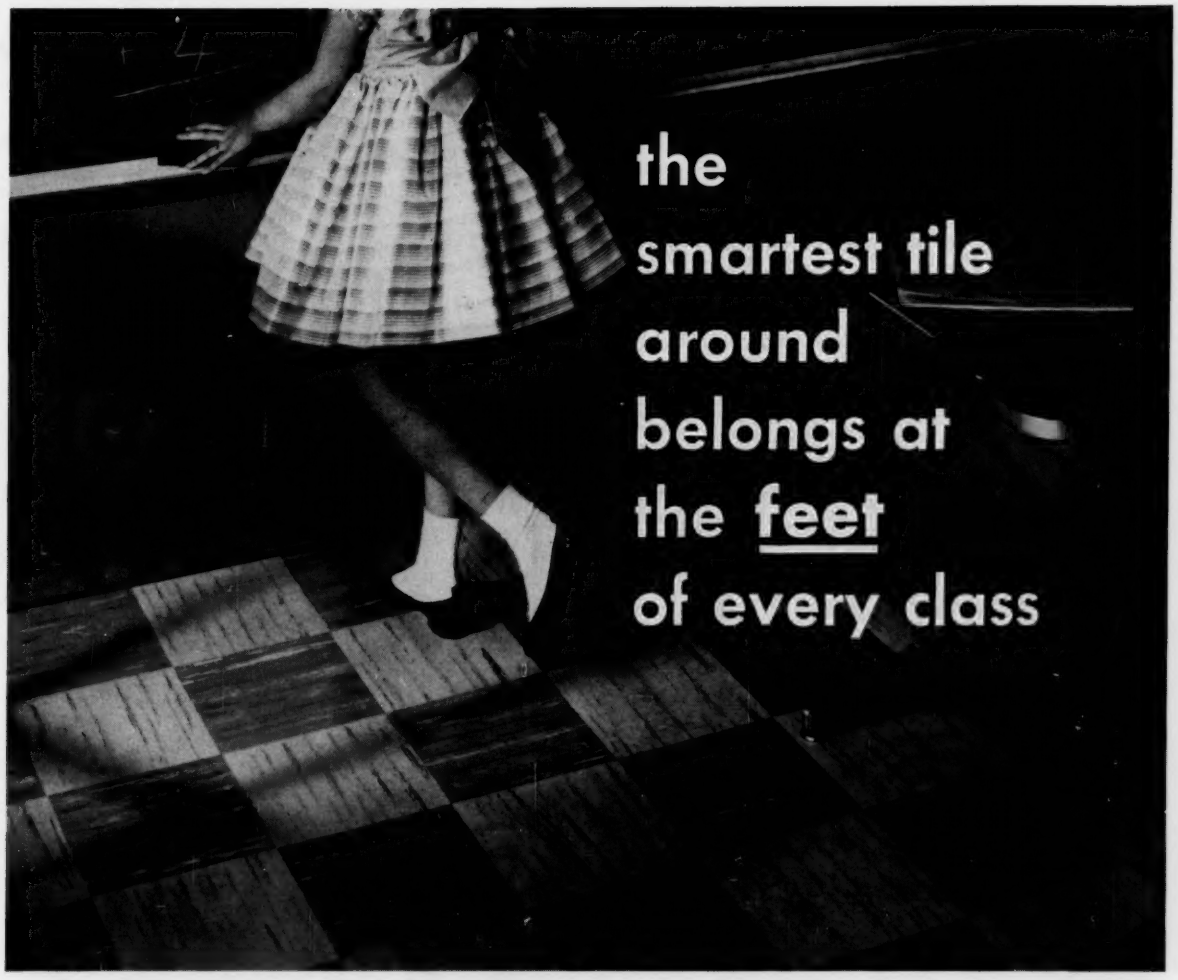
The suit against Radio Station KUJ, Walla Walla, was one of several against stations that carried the broadcast. The first one against Mr. Lewis, a $500,000 libel suit recently tried in Baltimore, resulted in a deadlocked jury. Other suits based on the same factual circumstances are still pending in other jurisdictions.

Disagrees That Bright Students Should Shun Business Education

URBANA, ILL.—Prof. Herbert A. Tonne of the business education department, New York University, has assailed the recommendations of James B. Conant and others who would outlaw vocational subjects from the high school education of bright students. Professor Tonne addressed business education teachers attending a summer session here recently.

"No group of subjects has a monopoly of power to train the mind," said Professor Tonne, in criticizing Dr. Conant's idea of bright students taking five "solid" subjects each year of high school (English, history, science, mathematics and languages).

"I challenge Mr. Conant to find high school bookkeeping, as presented in the three most widely used texts, lacking in intellectual content," Professor Tonne continued. . . . "We need workers in business with IQ's above 110 as well as below," Professor Tonne said.



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School Head Gets 12½-25 Years for Forging School Checks

PHILADELPHIA.—Faber E. Stengle, 67 year old former superintendent of schools at Collingdale, Pa., recently was sentenced to 12½ to 25 years in the Eastern State Penitentiary on forgery charges growing out of the theft of $201,927 in school funds.

Judge John V. Diggins, also of Delaware County, fined Mr. Stengle $78,798 and ordered him to make restitution of $123,129. Mr. Stengle had used 285 checks to withdraw sums of money from school funds over a period of some 20 years.

At his trial, Mr. Stengle pleaded guilty to eight indictments and waived presentation of the case to the grand jury. His attorney contended that Mr. Stengle's salary was not equal to his station in life. At the time of his arrest, Mr. Stengle admitted spending some of the money on a red-headed divorcee.

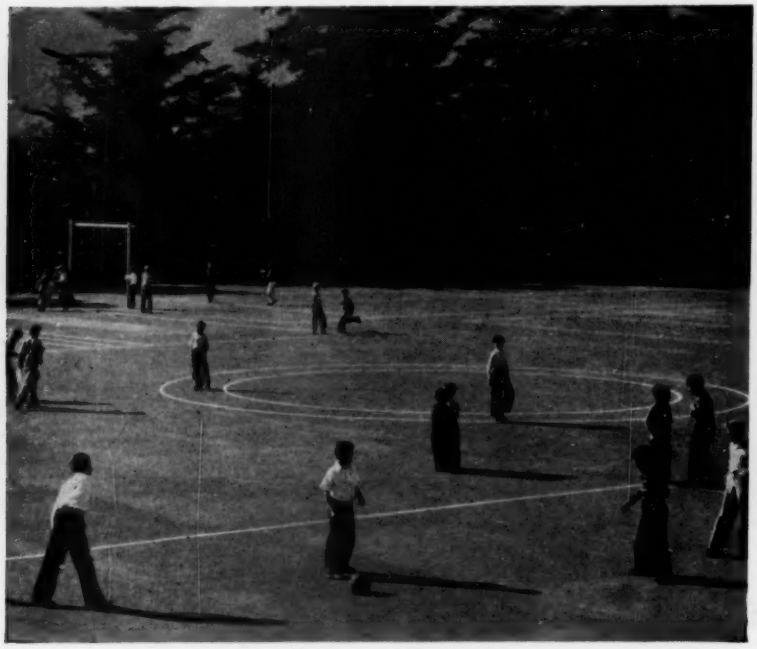
Athletics Needs Careful Grading, Symposium Says

SAN FRANCISCO.—Athletic competition needs to be as carefully graded as other parts of the school program, Fred V. Hein, Ph.D., of the A.M.A. Bureau of Health Education, said at the symposium on competitive athletics for school children during the 107th annual meeting of the American Medical Association.

No boy or girl should be denied the opportunity of gaining the values of sports participation, Dr. Hein continued. However, he added, medical supervision is required to make certain the program will be conducive to the health and safety of each child.

Recommended program for children under 13 years of age includes varied informal play opportunities and intramural sports in the upper elementary and early junior high school years. At this stage, competition confined to teams within an individual school is favored.

Occasional invitation games, sports days, and play days involving two or more neighboring schools may be included but the emphasis would be on informality without high-pressure elements such as tournaments.



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Los Angeles School Building Program Costs $1 Million Weekly

LOS ANGELES.—Approximately $1 million weekly is being spent for the construction of new school facilities in the nation's largest school building program—a program which was initiated here in 1952.

A $158.5 million bond issue to provide classroom facilities in elementary, junior and senior high schools and junior colleges for 90,000 students in the city's schools recently was approved by school district voters on three separate propositions by margins of 70 per cent or higher.

Under the terms of the bond issue, a total of 2534 classrooms, plus other additions and improvements, will be built. Funds for the program now in effect were overwhelmingly approved by district voters in 1955 when a bond issue of $133 million was submitted to the electorate. These funds are almost all spent as the campaign to reduce half-day sessions for 33,000 students continues.

Elementary schools will get $51 million; junior and senior high schools, $81.5 million, and junior colleges, $26 million.

Southern Presbyterians Will Not Circumvent Integration

CHARLOTTE, N.C.—The use of church facilities and buildings as classrooms to circumvent the Supreme Court ruling to enforce integration in the South was barred recently by the U.S. (Southern) Presbyterian Church at its 98th annual general assembly.

By defeating the minority report, 288 to 124, the assembly reaffirmed the church's endorsement in past years of the high tribunal's order and supported the assembly's Council on Christian Relations. The council has frequently expressed opposition to segregation and enunciated liberal views on other issues.

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Overall cabinet size 7'2" high, 5'4" wide, 6½" deep. Cabinet can be recessed in-the-wall or fastened against-the-wall.

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Tables and benches are separate units that can be kept attached to cabinet for quick lunches, arts and crafts, etc., or rolled free for banquets, games and other activities where tables are needed. Choice of top materials in many patterns and colors.

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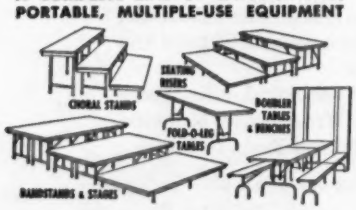

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COMING EVENTS

JULY

26-29. National Audio-Visual Convention, Chicago.

28-Aug. 7. World Confederation of Organizations of the Teaching Profession, Rome, Italy.

AUGUST

11-15. American Vocational Association, 52d annual meeting, Buffalo, N.Y.

18-20. National Council of Mathematics Teachers, N.E.A., 18th annual summer meeting, Greely, Colo.

24-30. National Conference of Professors of Educational Administration, 12th annual conference, Kent, Ohio.

SEPTEMBER

22-27. National Council for Schoolhouse Construction, annual meeting, Seattle.

OCTOBER

5-9. Association of School Business Officials of the United States and Canada, 44th annual convention, New York.

10, 11. Department of Rural Education, N.E.A., Minneapolis.

12-13. County Superintendents, Department of Rural Education, N.E.A., Minneapolis.

20-24. 46th National Safety Congress and Exposition, Chicago.

21-24. American Dietetic Association, annual meeting, Philadelphia.

NOVEMBER

2, 3. Association of Urban Universities, 44th annual meeting, Omaha, Neb.

9-15. American Education Week. Theme —"Report Card U.S.A."

16-20. American School Food Service Association, 12th annual meeting, Philadelphia.

16-20. National Society for Crippled Children and Adults. Dallas, Tex.

JANUARY

26-28. National School Boards Association, annual meeting, San Francisco.

FEBRUARY

7-11. National Association of Secondary School Principals, N.E.A., 43d annual convention, Philadelphia.

14-18. American Association of School Administrators, Atlantic City, N.J.

16-18. American Educational Research Association, annual convention, Atlantic City, N.J.

MARCH

1-4. National Conference on Higher Education, 14th annual meeting, Chicago.

1-6. Association for Supervision and Curriculum Development, N.E.A., 14th annual convention, Cincinnati.

APRIL

12-18. National Library Week.

Different Languages, Same Subject. Over the world, more than 3400 educational periodicals are published in 79 countries and territories, the Educational Press Association reports in its yearbook, "America's Education Press."

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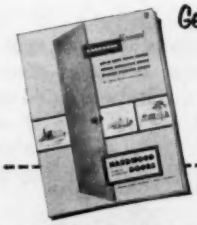

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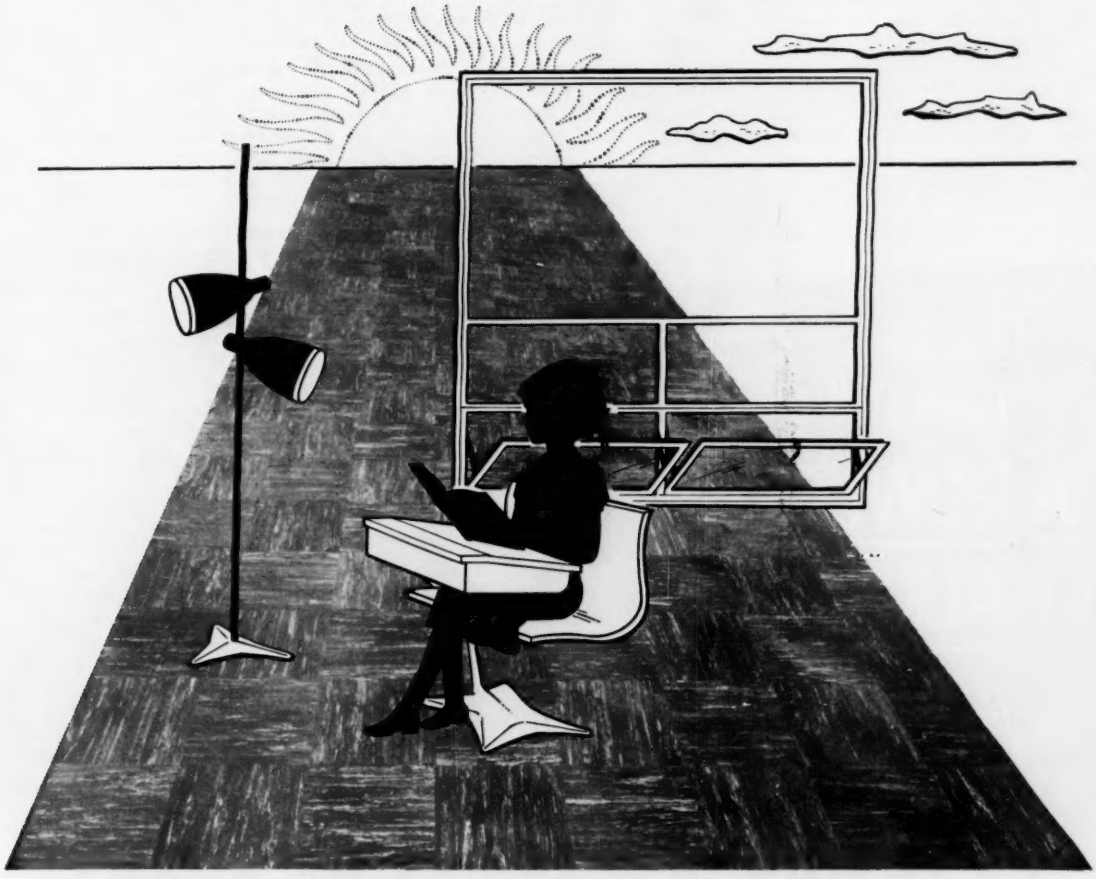

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Seminar in France and Holland Opens Administrator Exchange

WASHINGTON, D.C.—A seminar in comparative education will be held in France and the Netherlands for administrators from Feb. 1 through March 24, 1959.

This will be the first time that a project of this kind has been planned for American school administrators under the International Educational Exchange Program. Fulbright scholarships covering tuition, round-trip transportation from the grantee's residence in the United States to Paris, and travel within France and the Netherlands will be provided.

Applications will be accepted until August 15 by the Educational Exchange and Training Branch, Office of Education, Department of Health, Education and Welfare, Washington 25, D.C.

Consolidated District Voters Approve, 3 to 1, $9,940,000 Bond

GOLDEN, COLO.—Voters of School District R-1 in Jefferson County, the first county in Colorado to consolidate into one district, recently approved, by a 3 to 1 majority, a bond issue for $9,940,000. Proceeds will be used for: construction of a new high school accommodating a thousand students, two junior high schools with a capacity of 1500 students, and eight elementary schools accommodating 2720 students; additions to three existing high schools and five elementary schools; site selection, and ground improvements.

This is the third bond issue to be voted on since the 39 former districts in Jefferson County consolidated in 1950 to form District R-1. The first bond issue was for $10 million. The second bond issue, for $7,750,000 in 1955, gained public recognition when Edward R. Murrow used it in connection with a television broadcast on the 1944 White House Conference on Education.

Community College Election Gets 2 to 1 Majority Vote

DEARBORN, MICH.—A special millage election for the Henry Ford Community College here recently was approved by district voters with a 2 to 1 majority. This was reportedly the largest per cent of Yes votes for a school financial election in Dearborn.

The special election was called to provide a portion of the funds needed to move and expand the Henry Ford Community College. The board asked authorization for a $4,950,000 bond issue to be paid off by a three-fourth mill levy for 20 years. It is expected that the bonds could be retired in 15 to 17 years.

The college at present is situated on a 22 acre site. It is planned to move it to a 75 acre site donated by the Ford Motor Co. The new site will be on the Fairlane estate adjacent to the Dearborn branch of the University of Michigan. The recommendation was made by the Community College Development Committee following an intensive study of the problems of the college.

New Educational, Research Center Proposed at Wichita

WICHITA, KAN.—Plans for a College of Education Center including a research facility which will be an "Elementary School of Tomorrow" recently have been announced by the University of Wichita. Frank Lloyd Wright, 88 year old dean of architecture, has been commissioned by the university's governing body as architect for the campus project, after the regents had approved his preliminary drawings of the proposed center.

The school will be used to develop and try out instructional procedures and materials for regular and specific classrooms and large group instruction as in television education, Jackson O. Powell, dean of the college of education, said.

Commenting on the proposed educational center, Harry F. Corbin, university president, stated: "The proposed elementary school in this center will serve as a laboratory for the evaluation and appraisal of the most promising technics for educating children for a democratic world."

The teacher's job can be made easier (and with better results) if care is taken in the selection of the classroom chalkboard. That is why many school administrators and architects specify or insist on "chalkboards by Rowles." They realize that the Rowles Chalkboard has the features that make it a perfect educational tool . . . . .

- **Easy to read, easy to clean . . . with Rowles "Velvetone" writing surface.**
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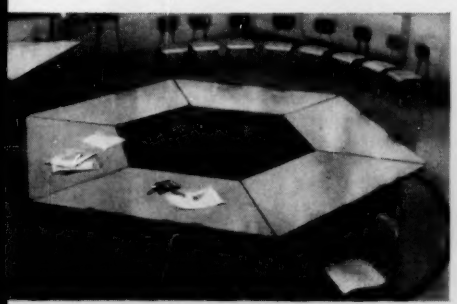
Beautiful, practical Panelyte comes in a complete range of authentic wood grain finishes, marble effects or decorator solids. And since the color of Panelyte is *sealed in*, repainting and re-finishing costs are *out*. Important, too, is Panelyte's low reflectance value which reduces glare . . . keeps it from harming young eyes.

So when you're buying new equipment for classroom, playroom or cafeteria, take a good close look at the surface. Ask what it is. Make sure it's Panelyte!



Kindergarten furniture with Panelyte surface
by Schwayder Bros., Inc.

Cafeteria tables topped with Panelyte
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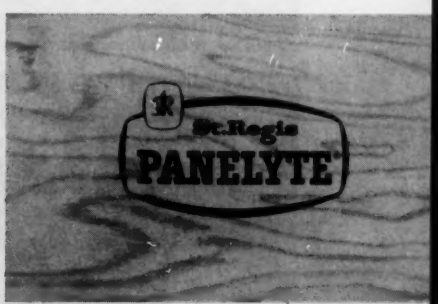
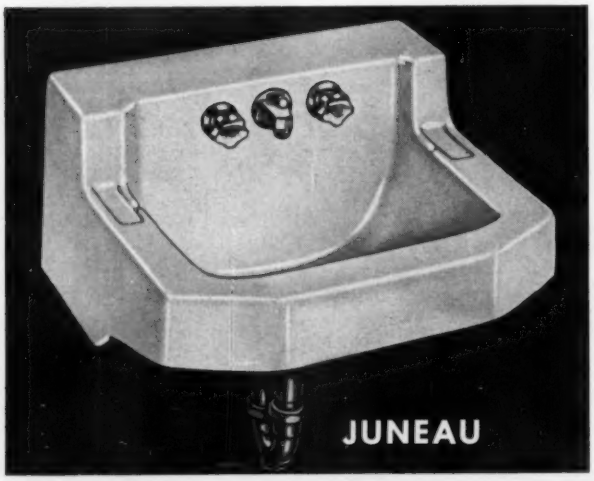


Would Offer States $28 Million for Driver Training Programs

WASHINGTON, D.C.—Awareness of the importance of driver training programs reached a new level in June with the introduction of a bill which would offer to the states annually on a matching fund basis federal aid of $28 million plus administrative expenses. The program would be set up under the Secretary of Health, Education and Welfare.

Included as legitimate expenses would be the purchase or rent of facilities, equipment, training aids, and other necessary supplies. Also covered by the bill are the costs of promoting training methods and establishing proper curriculums through workshops, conferences, short courses, and related methods at schools or classes under public supervision and control. No portion of the money could be used for buildings or their repair, or for the support of religious or private schools and colleges.

The purpose of the federal assistance is to aid the states and territories "in research concerning, procurement for, and the establishment of standards, methods and curriculums of driver training." Funds would be apportioned to participating states on a population basis, and would have to be matched 100 per cent by state or local funds. Any unexpended funds allotted to a state would be deducted from the succeeding annual allotment. If a state did not require all of the funds apportioned to it, the sum not required would be apportioned among other participating states.



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Extra strength, utility, for school use

The Kohler Juneau lavatory and Tech sink are built to withstand years of hard usage and keep down maintenance costs. The sparkling, glass-hard surfaces clean easily. Constellation fittings—all-brass, chrome-plated—insure convenient, positive action, have maximum resistance to corrosion and wear.

The Juneau, of vitreous china, has generous extra wall-bearing surface—screw openings at the base and a newly designed hanger provide firm wall anchorage. Practical features include an unobstructed shelf, anti-splash rim.

The Tech sink, of acid-resisting enameled iron, has a faucet for classwork, with high-arched spout that simplifies filling receptacles, and a self-closing bubbler for drinking. Write for booklet.

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Professors to Study Administrative Behavior

KENT, OHIO.—The 12th annual program of the National Conference of Professors of Educational Administration (N.C.P.E.A.) will take place here on August 24 to 30.

Meetings and discussion groups will center on the theme: "Administrative Behavior in a Special Setting—Implications for Preparation Programs and Theory." Jack R. Childress, assistant dean, school of education, Northwestern University, Evanston, Ill., is chairman.

"Crowded Out" to Be Shown on TV as Schools Open

WASHINGTON, D.C.—The story of overcrowded classrooms will be told in American living rooms via the television premiere of a new film, "Crowded Out," released by the National Education Association the week of September 12.

The film, eighth in an N.E.A.-State Education Association series of public relations films, relates what happens to children and teachers when schools are overcrowded. Earlier films include "A Desk for Billie" and "Skippy and the Three R's."

Would Step Up Experiments in Teaching Mathematics

WASHINGTON, D.C.—More experimentation within today's mathematics classes to improve mathematics instruction without resorting to crash programs is recommended by the National Council of Teachers of Mathematics.

The Council said that teachers now can provide: grouping of students in classes on the basis of their ability; special instruction for exceptional students; new content, and more unified presentation of mathematics as a logical system.

Keeps Parents Informed on Program for Abler Students

HARRISON, N.Y.—Supt. Louis M. Klein believes that parents want to know what the school is doing for their children.

Mimeographed information on the school's program of education for gifted students and a report on Harrison High School graduates and the colleges and universities they have attended, are attending, or are going to attend were mailed to parents. A questionnaire to be filled out by the parents also was enclosed to survey the human resources in the community that could be tapped for the school's instructional program.

ABOUT PEOPLE

CHANGES IN SUPERINTENDENCIES

Lloyd W. Ashby from Cheltenham Township School District, Elkins Park, Pa., to Ridgewood, N.J.

Claude Riley from Friendship School, Altus, Okla., to Binger, Okla.

Arnold W. Salisbury from Community Unit School District No. 205, Galesburg, Ill., to Cedar Rapids, Iowa.

Francis W. Tremblay, principal, Warm Springs, Calif., to superintendent, Smith River Union School District, Smith River, Calif.

C. W. Parliment from Phillipsburg, N.J., to Ridgefield, N.J.

Ray E. Reid, assistant state superintendent of public instruction, to superintendent, Arlington, Va.

Charles A. McNurlin from Tonasket, Wash., to Selah, Wash., succeeding **Elmo Steinke,** who resigned.

Kensey Dillon, Ramsay High School principal, Mount Pleasant, Pa., to superintendent there, succeeding **John C. Haberlen,** who is retiring after 47 years in Mount Pleasant borough schools.

Charles D. Long, assistant superintendent, Chester, Pa., to superintendent there, succeeding **Addison H. Showalter.**

Harry S. Ruhl, area supervising principal, Danville Joint School, Danville, Pa., to superintendent, Montour County, Danville, Pa., succeeding **Fred W. Diehl,** who is retiring.

Fred T. Gillogly, assistant superintendent, Greene County, Waynesburg, Pa., to superintendent there, succeeding **D. C. Longanecker,** who is retiring after 32 years as an educator.

Omer S. Williams from District 13, DuSable High School, Chicago, to District 4, which includes Austin and Steinmetz high schools.

Ivan Hollen, athletic director at Washington High School, Washington, Ind., to superintendent, Bicknell, Ind., effective August 1. He succeeds **Harold Axe,** who is retiring after 29 years in the Bicknell school system.

John H. Davisson, Miami County superintendent, Peru, Ind., to Rochester, Ind., succeeding **Raymond Julian.**

George A. Eddie from Fairmont, Minn., to Hibbing, Minn.

H. A. Sadler from Keytesville, Mo., to Paris, Mo., succeeding **L. E. Lewis,** who resigned.

Robert H. Clark from Webb, Mo., to assistant superintendent, Raytown, Mo.

William B. Herbein, assistant superintendent for Berks County, Reading, Pa., to superintendent there, succeeding **Newton W. Geiss,** who retired.

Robert F. Nicely, assistant superintendent and director of elementary education, Greensburg, Pa., to acting superintendent there, succeeding **Samuel B. Bulick,** who resigned after 17 years with Greensburg schools.

Clyde H. Wurster, director, division of pupil personnel, Williamsport, Pa., to superintendent there, succeeding **George H. Parks,** who is retiring.

Clarence C. Brown, supervising principal, Fairview Township-Karns City Joint Schools, Butler, Pa., to superintendent for Butler County, Butler, Pa., succeeding **John T. Connell,** who served in that capacity for 38 years.

Walter E. Wood, assistant superintendent, Wilkes-Barre, Pa., to superintendent there, succeeding **John Lumley,** who resigned. **Allen E. Bacon** is acting superintendent.

Karl Seiffert, principal, East Forest Joint School, Marienville, Pa., to superintendent for Forest County, Tionesta, Pa.

Albert J. Hada from Dacoma, Okla., to Marshall, Okla., succeeding **C. T. Shades,** who recently resigned.

Fred E. Sweely, assistant county superintendent, Clearfield, Pa., to county superintendent there, succeeding **David A. Yingling,** who is retiring.

Niles E. Norman, supervising principal, Aspinwall, Pa., to superintendent, Hollidaysburg, Pa., succeeding **J. Harry Henshaw,** who is retiring.

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Robert C. Ray, high school principal, Cuyahoga Heights, Cleveland, Ohio, to superintendent there, succeeding **William G. Bahner,** who has retired.

Paul C. Gallaher, assistant superintendent, Berea, Ohio, to superintendent there.

Robert M. Finley, assistant superintendent, Chagrin Falls, Ohio, to superintendent there, effective August 1. He succeeds **Lewis W. Sands.**

OTHER APPOINTMENTS . . .

Harold Spears

Harold Spears, superintendent in San Francisco since 1955, has signed a new four-year contract with an annual salary of $29,000. Prior to his superintendency, Dr. Spears served in the San Francisco school system for eight years, first as curriculum director, then as assistant superintendent in charge of elementary schools. A native of Indiana, Dr. Spears formerly headed the department of education, Montclair Teachers College, N.J., and was superintendent of the township high school, Highland Park, Ill. He has written nine books in the field of curriculum since 1937.

Floride Moore, professor of education in home economics and head of the department of education in home economics, University of Georgia, Athens, Ga., to head of the department of home and family life, Teachers College, Columbia University, effective September 1.

William P. Fidler, associate editor of the *A.A.U.P. Bulletin,* to general secretary of the American Association of University Professors, effective September 1. He succeeds **Robert K. Carr.**

Howard J. Bowers, director, division of teacher education and certification, Ohio State Department of Education, to assistant superintendent in charge of instruction there.

Harry E. Boyd, superintendent, Benton, Ill., to director of finance, Springfield, Ill., schools.

Robert M. Winger

Robert M. Winger has been named by Michigan State Superintendent Lynn M. Bartlett to assistant superintendent and state director of vocational education. He succeeds the late **Harold J. Van Westrienen.**

Mr. Winger has been assistant vocational director since 1951. He joined the state education department in 1943. For the previous 16 years he was a teacher in the Detroit public schools, going there from his native state of Indiana.

Asa S. Knowles, president of the University of Toledo, Ohio, since 1951, to president, Northeastern University, Boston, effective July 1, 1959. He will succeed **Carl S. Ell,** who will retire, after 49 years at Northeastern and 19 years as university president there.

RETIRED . . .

G. E. McFarland, superintendent for 21 years for Delaware County, Delaware, Ohio. Succeeding him is **R. B. Warner,** superintendent, Elm Valley School District, Ashley, Ohio.

Edward C. Hodge, superintendent of Community Unit School District 208, Elizabeth, Ill.

Paul B. Cooper, superintendent, Derby, Kan.

Charles A. Miller, superintendent since 1944 at South Hadley-Granby, South Hadley, Mass., after 39 years in education.

Carl M. Deifenbach, superintendent for 20 years at Collingswood, N.J.

William L. Shuman, for 15 years superintendent of Cuyahoga County, Cleveland, after 47 years as a teacher and school administrator. **Fredric E. Webb,** assistant county superintendent, succeeds Supt. Shuman.

Oliver C. Kuntzleman, supervising principal, Spring-Ford Joint School District, Royersford, Pa., after 40 years in the educational field.

V. C. Holsinger, supervising principal for 32 years at Millvale High School, Pittsburgh. **James P. Swain,** principal at Millvale, succeeds Supt. Holsinger.

Ralph R. Smith, superintendent for more than 30 years at Lansdale, Pa. Succeeding him is **Arthur G. James,** elementary supervising principal there.

J. Frank Faust, superintendent, Chambersburg Area School System, Chambersburg, Pa., after 18 years superintendent there and 36 years with the Chambersburg system. **Edson B. Powell,** administrative assistant in charge of curriculum and instruction there, is Dr. Faust's successor.

Roscoe V. Shores, superintendent for 36 years at Kansas City, Mo.

Harold E. Akerly, assistant superintendent in charge of finance and business, Rochester, N.Y. He is succeeded by **James McAllister** of the University of Pennsylvania.

DIED . . .

Harold J. Van Westrienen

Harold J. Van Westrienen, state director of vocational education, Michigan Department of Public Instruction, died June 16. Prior to his appointment as director in 1953, Mr. Van Westrienen had served as supervisor of trade and industrial education and later as chief of trade and industrial education. Mr. Van Westrienen was the first president of the Michigan Industrial Education Society.

He served as president of the National Association of State Supervisors of Trade and Industrial Education in 1953. Prior to going to Lansing, he had been a teacher and administrator in Hamtramck public schools. He had been a member of the board of education at Royal Oak for 10 years, three years as president.

Strauss Reger Wood, 64, superintendent for Wetzel County, New Martinsville, W.Va.

Willis P. Wittmer, 44, superintendent, Boone Valley Community school district, Renwick, Iowa.

Irven T. Warthman, 59, retired superintendent, Ada, Ohio.

Arthur M. Cannon, 81, former superintendent for Lincoln County, Newport, Ore.

Clarence W. Marshall, 52, supervising principal, Dayton Area Joint High School, Dayton, Pa.

Elmer Baker, 44, superintendent for McMinn County, Athens, Tenn.

Milton E. Moody, 61, for 29 years superintendent for Washington County, St. George, Utah.

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Here's a welcome, low-cost addition to any playground—Recreation's Outdoor Fan-shaped Metal Basketball Outfit with 4' extension. The metal bankboard and extension are supported by two heavy 3" hot galvanized steel pipes, connected by a 2" steel pipe frame.

Take it from Rufus, the Guardian Angel, Recreation's new rubber Swing Belts eliminate swing injuries and dangerous falls.

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THE BOOKSHELF

ADMINISTRATION

School Boards Plan for Disaster Problems. Project writer, William M. Lamers, assistant superintendent, Milwaukee. National School Boards Association, Inc., 450 E. Ohio St., Chicago 11. Pp. 36.

Your A.A.S.A. in 1957-58. Official report of the American Association of School Administrators for 1957-58, including a record of the regional conventions held at St. Louis, San Francisco, and Cleveland. American Association of School Administrators, N.E.A., 1201 16th St. N.W., Washington 6, D.C. Pp. 271. $3.

The Teacher and School Organization. 3d ed. By Leo M. Chamberlain, vice president, University of Kentucky, and Leslie W. Kindred, professor of education, Teachers College, Temple University. Prentice-Hall, Inc., 70 5th Ave., New York 11. Pp. 538.

CONFERENCE PROCEEDINGS

Association of Urban Universities. Proceedings of the 43d annual meeting, at Detroit, Nov. 3-4, 1957. Edited by Doris O'Brien, assistant secretary-treasurer of the association, 5972 Lannoo, Detroit 36. Pp. 87.

CURRICULUM

Air, Winds, and Weather. First of elementary school science activities series. By J. Myron Atkin and R. Will Burnett. Rinehart & Company, Inc., 232 Madison Ave., New York 16. Pp. 58. $1.

Your Future in Science. By Morris Meister, principal, Bronx High School of Science, New York, and Paul F. Brandwein, director, division of education, Conservation Foundation. Science Research Associates, Inc., 57 W. Grand Ave., Chicago 10. Pp. 55.

Common Sense About Gifted Children. By Willard Abraham, professor of education and head, division of special education, Arizona State College. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 262. $3.75.

Improving Science Programs in Illinois Schools. Analysis and recommendations of a joint committee on improvement of science teaching. Edited by William O. Stanley, Harry S. Broudy, and R. Will Burnett, University of Illinois. Office of Field Services, 309 Gregory Hall, University of Illinois, Urbana. Pp. 87. 25 cents.

Driver Instruction. A guide for driver education and driver training. Revised ed. California State Department of Education. California State Prtg. Off., Sacramento. Pp. 96.

ELEMENTARY EDUCATION

The Elementary Teacher in Action. By Raymond H. Harrison, Ed.D., and Lawrence E. Gowin, Ed.D., division of education, Fresno State College, with photograph illustrations by Orville Goldner, director, Audio-Visual Center, San Francisco State College. Wadsworth Publishing Co., Inc., 431 Clay St., San Francisco 11. Pp. 283. $4.95.

FROM SCHOOL DISTRICTS

How Intensive Recruitment Keeps a Qualified Teacher in Every Classroom. San Diego Public Schools. Education Center, Park Blvd., El Cajon Blvd., San Diego 3, Calif. Pp. 8.

Plane Trigonometry. A guide for teachers. Philadelphia Public Schools. Board of Public Education Printing Dept., Philadelphia. Pp. 69.

English Language Arts: Grades 7-8-9. Curriculum Bulletin 11, New York Board of Education, 110 Livingston St., Brooklyn 1. Pp. 112. 40 cents.

GUIDANCE

Your Child's Emotional Health. How parents can provide emotional security for their children. By Anna W. M. Wolf, staff member, Child Study Association of America. Public Affairs Committee, 22 E. 38th St., New York 16. Pp. 28. 25 cents.

What P.T.A. Members Should Know About Juvenile Delinquency. A guide for action. National Congress of Parents and Teachers, 700 N. Rush St., Chicago 11. Pp. 95. 50 cents.

HEALTH EDUCATION

Nutrition in the Elementary School. By Frances R. Godshall, associate professor, home economics, Teachers College, Temple University. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 109. $2.75.

School Health Program. By Jessie Helen Haag, associate professor of physical and health education, college of education, University of Texas. Henry Holt and Co., 383 Madison Ave., New York 17. Pp. 515. $6.50.

INSTRUCTION

Teacher-Pupil Planning for Better Classroom Learning. By Louise Parrish, Muskegon, Mich., public schools, and Yvonne Waskin, formerly East Lansing, Mich., public schools and Michigan State University. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 157. $3.50.

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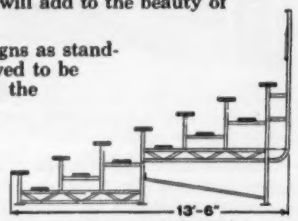
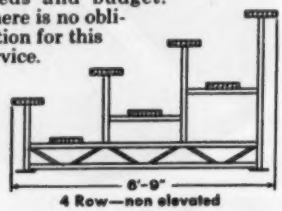
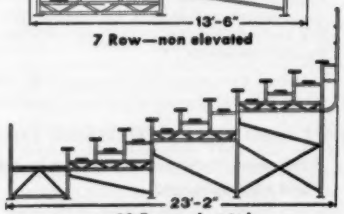


7 Row—non elevated



4 Row—non elevated



10 Row—elevated

Bleacher Division: WACO MANUFACTURING COMPANY
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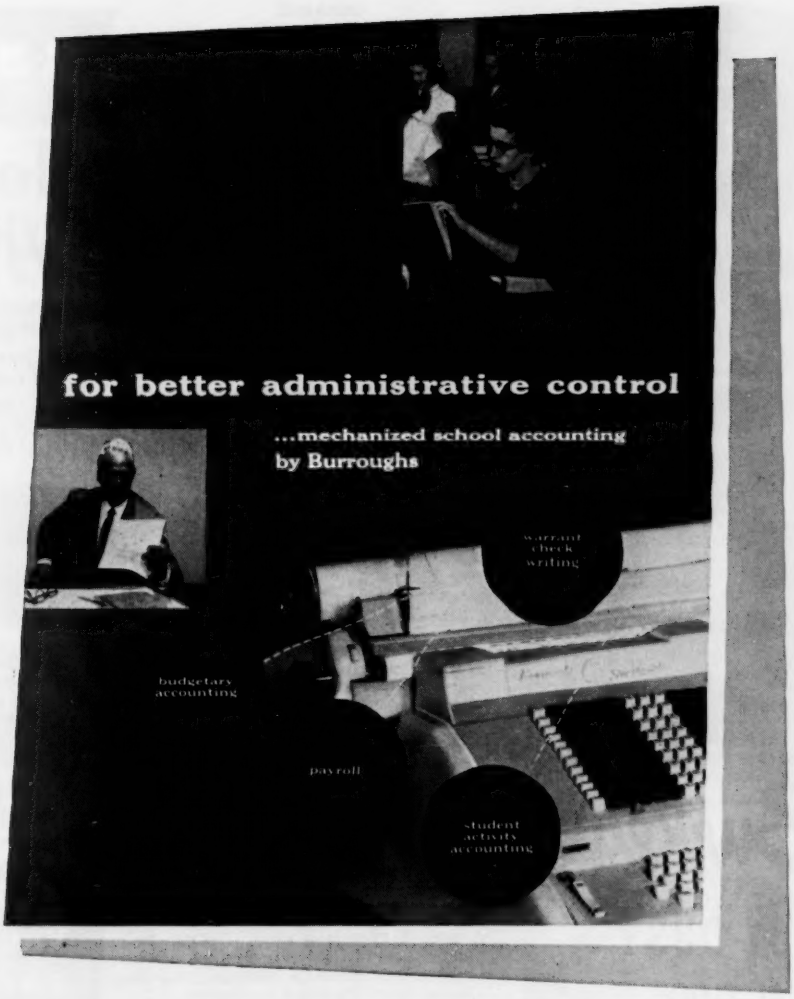

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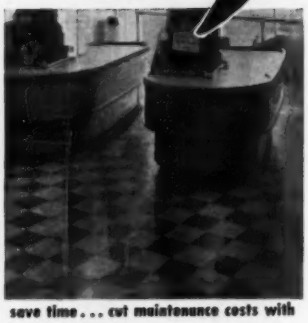

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LIBRARIES

Report of the Commissioner of Education's Committee on Public Library Service, 1957. University of the State of New York. State Education Department, Albany, N.Y. Pp. 66.

PERSONNEL

Speech Correctionists: the Competencies They Need for the Work They Do. Bulletin No. 19. Report based on findings from the study qualification and preparation of teachers of exceptional children. Prepared by Romaine P. Mackie, chief, exceptional children and youth, Office of Education, and Wendell Johnson, professor of speech pathology and psychology, University of Iowa. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 77. 45 cents.

The Beginning Teacher. Circular No. 510. A survey of new teachers in the public schools 1956-57. U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 56. 40 cents.

PHILOSOPHY OF EDUCATION

Philosophy and Education. Edited by Israel Scheffler, lecturer on education, Harvard University. Allyn and Bacon, Inc., 41 Mt. Vernon St., Boston 8. Pp. 296. $5.75.

An Assessment of the Experimentalist Educational Theory. By John L. Childs, professor emeritus, philosophy of education, Teachers College, Columbia University. Boyd H. Bode Memorial Lectures, 1957. College of Education, Ohio State University, Columbus. Pp. 33.

PSYCHOLOGY

Studying the Individual Pupil. By Verna White, director of education, Monterey County, Calif. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 230. $4.

PUBLIC RELATIONS

School Photojournalism. Telling your school story in pictures. By Look editors. Produced by Edward A. Hamilton. National School Public Relations Association, N.E.A., 1201 16th St. N.W., Washington 6, D.C. Pp. 73. $2.

SECONDARY EDUCATION

Teaching in the Secondary School. Revised ed. of **Principles and Practices of Secondary School Teaching.** By Herbert J. Klausmeier, professor of education, University of Wisconsin. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 487. $5.

TEACHER EDUCATION

Learning to Teach. A handbook for beginners. By Mary Muldoon, principal, Waverly, N.Y. Exploration Series in Education. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 279. $3.50.

TESTING

1957 Fall Testing Program in Independent Schools and Supplementary Studies. Educational Records Bulletin 71. Educational Records Bureau, 21 Audubon Ave., New York 32. Pp. 64.

YEARBOOKS

Basic Concepts in Music Education, Part I. Pp. 355. **Education for the Gifted,** Part II. Pp. 413. **The Integration of Educational Experiences,** Part III. Pp. 273. 57th yearbook, National Society for the Study of Education. Edited by Nelson B. Henry. University of Chicago Press, Chicago 37. Each: Cloth, $4. Paper-bound, $3.25.

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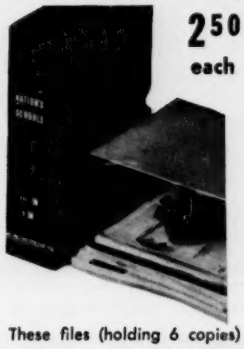

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Gold Bond Travacoustic will absorb 85% of this racket

Hallways that echo with noise are a distracting annoyance to teachers and students alike. Fireproof Gold Bond Travacoustic ceiling tiles can restore peace to the classroom by absorbing up to 85% of all noise that strikes them!

Travacoustic is handsome, too. Random fissuring adds distinction wherever Travacoustic ceilings are installed. Clean white surfaces with glare-free light reflection create a soft-textured look. Mineral fibre composition can't burn...can be vacuum-cleaned or repainted.

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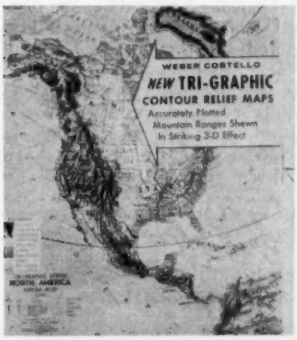
TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 96. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Three Dimensional Technic for Contour-Relief Maps

A series of new classroom maps from Weber Costello employs the three dimen-



sional technic to illustrate realistically the elevation patterns. Precise shading along contour lines heightens the effect and increases the accuracy. The maps give the effect of raised relief when viewed from classroom seats. The new series of Contour-Relief wall maps is complete, including the continents, the world and the United States and Canada. **Weber Costello Co., Chicago Heights, Ill.**

For more details circle #315 on mailing card.

Modern Metal Furniture for Dormitories and Lounges

A complete line of contract furniture for school and college use is announced by The Howell Company. The new institutional line combines a coordinated selection of lounge furniture, including davenports, arm chairs, sectionals, ottomans and double seat benches, with tables, desks and similar items for lounge, cafeteria and office use.

The Howell line of modern metal furniture includes table tops in several woodgrain plastics, two-tone inlay combinations

and other designs in durable laminated plastic. Chair frames and table legs are constructed of tubular steel, finished in Bronztone or Blacktone. The tapered legs have brass ferrules and self-leveling feet. The wide selection of upholstery covers includes plastics, fabrics and other materials. Cushions are of patented "No Sag" spring construction with reversible spring-filled or foam rubber cushions. **The Howell Co., St. Charles, Ill.**

For more details circle #316 on mailing card.

ScholarCraft Arm Chair Serves Many Uses

Large, comfortable arm rests, formed of Northern Birch plywood as are the contoured back and seat, make the new ScholarCraft arm chair suitable for use as a teacher's chair, in the office, or in lounge or lobby. The support is sturdily welded to the frame for strength and rigidity and the careful design assures maximum comfort with good posture. The new arm chair is available in heights of 16, 17 and 18 inches, finished in metallic green, metallic

bronze or chrome. **Southeastern Metals Co., 3925 N. 29th St., North Birmingham, Ala.**

For more details circle #317 on mailing card.

Cabinet Work Benches Added to Equipto Line

The line of Equipto work bench models has been increased through the addition of a new series of 104 cabinet work benches. Featuring closed ends and backs with doors, drawers and shelves to suit the needs, the new benches are available in steel, Masonite on steel, maple or plastic bonded tops and have large storage capacity designed to save time and steps. The tapered bench legs allow comfortable toe room and the benches are available in four, five and six-foot lengths, equipped with electrical knock-out for a handy power source. **Equipto, Aurora, Ill.**

For more details circle #318 on mailing card.

Self-Propelled Floor Maintainer Is Battery Operated

Operation without cords or other accessories usually required for self-propelled floor maintainers is the interesting development introduced in the Model PS-20BB ClarkeAmatic. The battery operated unit is designed for small, medium and large floor area maintenance. Because of the

increased speed of operation over hand operated machines, time and costs are saved.

The machine is operated by a simple push button and lever control, automatically propelling itself while metering solution to the brush, scrubbing and drying the floor. It has a forward speed of 155 lineal feet per minute and a 20-inch diameter brush. Heavy duty batteries operate the machine which is furnished with an automatic battery charger. **Clarke Sanding Machine Co., 30 E. Clay Ave., Muskegon, Mich.**

For more details circle #319 on mailing card.

Control Unit for P.A. System Converts for Intercom and Paging

A new control unit designed to convert any public address system to an intercom and paging system is offered by Allied. Especially effective for use in schools, hospitals and other institutions where a large number of locations must be in contact with a central point, the control unit requires no AC power and includes a

volume control, Talk-Listen-Program switch and an All-Call switch. The built-in speaker serves also as a microphone or an external microphone may be used. **Allied Radio Corp., 100 N. Western Ave., Chicago 80.**

For more details circle #320 on mailing card.

(Continued on page 86)

What's New ...

Dry Chemical Extinguishers Provide Fire-Killing Gas

Fire-killing gas is formed when dry chemical powder is sprayed from the new pressurized Fyr-Fyter extinguishers. Two sturdily-constructed, high-capacity dry chemical powder extinguishers with fast action pressurized squeeze-lever construction are now available in the Fyr-Fyter line.

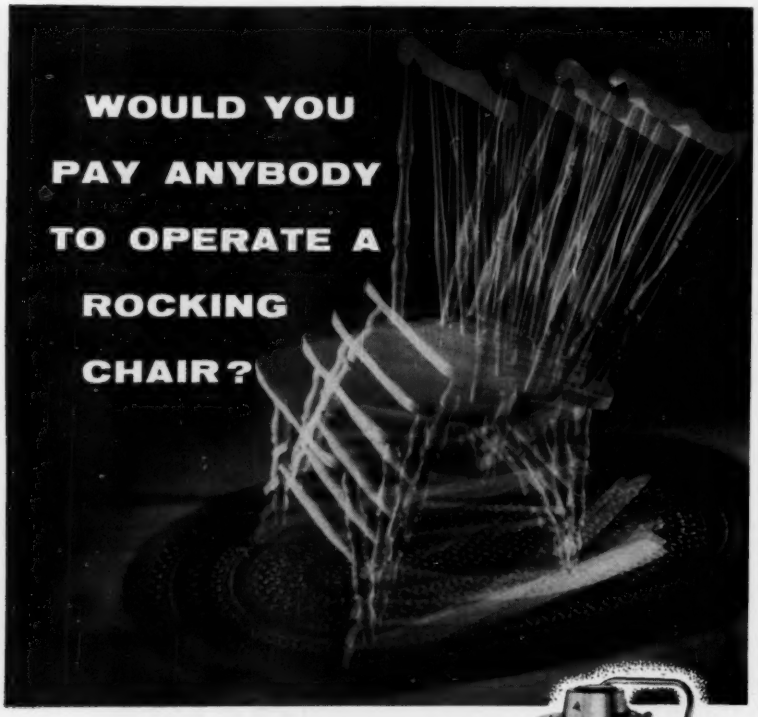
The two new Fyr-Fyter models contain 20 and 30 pounds respectively of non-toxic and non-freezing powder which, as a non-conductor, can be used on Class C electrical fires and is effective against Class B flammable liquid fires. **Fyr-Fyter Div., 221 Crane St., Dayton 3, Ohio.**

For more details circle #321 on mailing card.

Practice Package for Machine-Dictation

Every essential for training up to 15 students in machine-dictation is included in the new Dictaphone secretarial practice educational package. Each unit of the new course provides a new 200-page textbook, a new fully transistorized, touch-button Time-Master transcribing machine, 18 freshly recorded Dictabelt records, a complete set of training aids, regular service on the machine and advice and help from experienced Dictaphone personnel. The textbook was developed in conjunction with the McGraw-Hill Technical Writing Service. **Dictaphone Corporation, 420 Lexington Ave., New York 17.**

For more details circle #322 on mailing card.



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Variable-Focus Lens Adapts Film Projector

Sixteen millimeter film projectors need only one lens for use in classroom or audi-

torium showings with the new Bell and Howell Filmovara variable-focus lens. It is instantly and continuously adjustable to any focal length between 1¾ and 2¼ inches and embodies the flexibility and versatility required for school use. The Filmovara is of 9-element design, highly corrected and coated for maximum light transmission. **Bell & Howell, 7100 McCormick Rd., Chicago 45.**

For more details circle #323 on mailing card.

Koroseal Multi-Link Matting Has Closely-Spaced Links

Designed for use where high spiked heels are worn, the new line of Koroseal Multi-Link Matting is closely spaced. While the narrow heels cannot squeeze through, the spaces do permit proper drainage and air circulation for quick drying. The new matting is designed for use where there is heavy traffic and is available in nine colors or combinations of colors. **B. F. Goodrich, Akron, Ohio.**

For more details circle #324 on mailing card.

Whole, Boned Turkey Is Pre-Cooked for Portion Serving

Light and dark meat are combined in the boneless roll of pure turkey meat offered in the new Armour Star Turkey Roll. The roll can be sliced to precise portion sizes for sandwiches, plate dinners, salads or casseroles. It speeds preparation of turkey dishes while offering full portion and cost control.

Armour Star Turkey Roll consists of an eight to ten pound roll of 60 per cent

white and 40 per cent dark meat completely sealed in a moisture-proof casing and hard frozen to protect quality and flavor until used. There is no shrinkage or waste, all natural meat juices are retained, and the Turkey Roll requires minimum storage space. **Armour & Co., Poultry Dept., Chicago 9.**

For more details circle #325 on mailing card.

(Continued on page 87)

What's New ...

Brooms and Mops for Institutional Cleaning

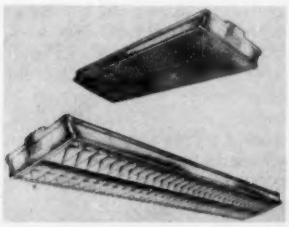
New sweep-type dust mops with swivel-action and new push brooms with wet-proof Permene bristles are added to the line of O'Cedar products for heavy duty cleaning. The swivel type mop has an exclusive chrome plated swivel socket permitting the mop to turn in any direction for easy sweeping around corners, in narrow areas and around furniture. The yarn head is quickly removed with a snap-off button for washing. It has lightweight cadmium plated frame and is available in 24, 30 and 42-inch yarn spreads.

The three new push brooms retain their lively flicking action even when wet, resist rot and deterioration indefinitely and the Permene bristles give long wear. The brooms are available in 14, 18 and 24-inch sizes. **O'Cedar Industrial Sales Dept., 2246 W. 49th St., Chicago 9.**

For more details circle #326 on mailing card.

Fluorescent Luminaires for General Area Illumination

Designed to provide efficient, comfortable lighting for general area illumination,



the new Guthlite Jr. fluorescent luminaires have modern, functional lines. The new Prismoid Gratelite bottoms are louver lens with vents, assuring lamp and ballast ventilation and reducing maintenance costs. The new fixtures are constructed of heavy gauge coated steel finished in White Permalux. They can be adapted for up and downlighting or for 100 per cent downlighting, as required. Installation can be at ceiling or as pendant, in continuous rows or individual mountings. **Edwin F. Guth Co., 2615 Washington Blvd., St. Louis 3, Mo.**

For more details circle #327 on mailing card.

More Balanced Sound With Dual Speaker Radio

Model ATC-200 is a twin speaker AM classroom radio designed to provide balanced life-like sound. It employs two five by seven-inch diagonal mounted speakers and can be used as a high fidelity tuner, with earphones or with an external speaker. A high insulation factor power transformer completely isolates the AC supply from the chassis, thus eliminating hazards of electrical shock. The radio is Underwood Laboratories approved and is protected by a fuse which can be replaced without removing the chassis from the cabinet. The unit is enclosed in a laminated hardwood case for easy portability. **Audiotronics Corp., 11057 Weddington St., North Hollywood, Calif.**

For more details circle #328 on mailing card.

(Continued on page 88)

Halsey Taylor® offers a wide variety of newly styled health-safe coolers

EXPLOSION-PROOF model for use where continuous temperatures exceed 110°

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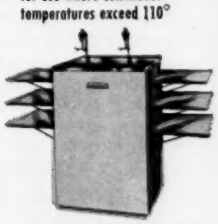
STAINLESS STEEL Cabinets to fit any modern decor

LOW-LEVEL type for schools and wherever "small fry" gather



CAFETERIA type for factory and restaurant use

You'll find Halsey Taylor coolers just right for commercial or industrial applications. They are available in air-cooled or water-cooled models, with sturdy life-time cabinets and sanitary two-stream projectors. Write for catalog or see Sweet's.

The Halsey W. Taylor Co., Warren, Ohio

93

THE CHAIRS WITH NO "WEAR OUT" ARE FOLDING METAL CHAIRS BY DURHAM

In folding metal chairs, specify DURHAM and get durability along with the most handsome styling and best value for your equipment dollars. Buy Durham chairs for classrooms, auditoriums, cafeterias, conference centers—anywhere you need chairs easy to set up, fold, store, set up again. Solid comfort too! Write today for catalogs. Be sure of the best—buy DURHAM!

TESTED AND APPROVED BY LEADING INSTITUTIONS FOR OVER 50 YEARS

New Folding Tablet Armchair

Exclusive! Wrap Rack

Complete line of tubular and channel steel frames, all-metal and upholstered styles for adults and juveniles. Also stack chairs, folding tables, chair-ladders, steel shelf unit, utility carts. See catalog for superior construction features.

DURHAM Manufacturing Corporation
Dept. N-88, Muncie, Indiana

America's Most Complete Line of Folding and Informal Furniture

What's New ...

Fluorescent Visionaire Has Controlled Brightness

High intensity illumination with controlled brightness in the glare zones is incorporated into the new line of fluorescent Visionaire fixtures. The new fixtures utilize the Holophane clear acrylic Prismalume panels, having a scientifically designed prismatic pattern which controls the light distribution. The result is more efficient lighting on the work plane with greatly reduced brightnesses from normal viewing angles. Each prismatic panel has vanes integrally molded intact in both crosswise and lengthwise directions. This not only adds strength, but also contributes to better shielding.

The Visionaires are available as slim surface-mounted fixtures or recessed to fit completely flush with the ceiling. Heavy

gauge stiffeners on the recessed box assure sturdy construction and safe installation. The new fixtures are adaptable to many standard ceiling construction methods. All fixtures are Bonderite-treated for corrosion resistance and finished in all-white, baked enamel. **Sunbeam Lighting Co., 777 E. 14th Place, Los Angeles 21, Calif.**

For more details circle #329 on mailing card.

Series of Wall Maps Brings Up-to-Date Data

A series of nine new political wall maps has been edited for publication by four eminent geographers. The new series shows all of the latest changes in countries and boundaries, permitting the teaching of up-to-date information on political divisions as they appear today. Maps in the series include the United States and Possessions, Europe, Asia, Africa, North America, South America, the Middle East, Southeast Asia and Australia, and a map of the world. A physical inset map on each wall map shows topographic features at a glance. **A. J. Nystrom & Co., 3333 N. Elston Ave., Chicago 18.**

For more details circle #330 on mailing card.

Color Chip Rubberlike Is Thermoplastic Floor Covering

A floor-protecting runner for heavy traffic areas in schools and other public buildings is offered in Color Chip Rubberlike. The new thermoplastic floor covering product is flecked with two colors by means of plastic chips added during manufacture. Colors available are red and white or green and white flecks against a black background. **Bird & Son, Inc., East Walpole, Mass.**

For more details circle #331 on mailing card.

Microfilm Reader Has Ambidextrous Controls

The film winding wheel may be placed on either side of the viewing screen in the new Medalist 16mm film reader. Placing it on the left side permits right handed people to take notes continuously if desired. All operating controls are within

easy reach in front of the screen. They include the winding wheel for advancing the film; a scanning lever for centering film images; orientation wheel for turning film images upright; a focusing knob, and spindles for leading the film. The new gate-like type of aperture is self-loading. When the film starts moving, the aperture gate closes automatically and grasps the edges of the film, holding it in focus at all times.

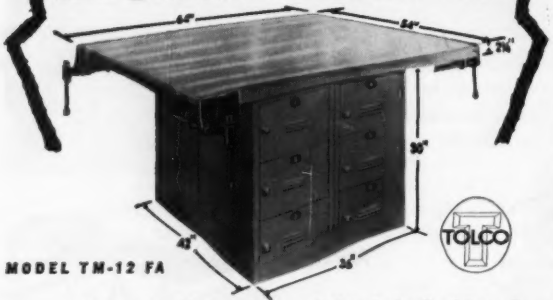
Paper facsimile prints can be made with the Medalist without the need of a dark room. The Medalist reader offers a choice of three magnifications, one lens being supplied with the reader and the others available as accessories. The Recordak Medalist Reader is easily moved to place of need and occupies minimum desk space. **Recordak Corporation, 415 Madison Ave., New York 17.**

For more details circle #332 on mailing card.

(Continued on page 89)

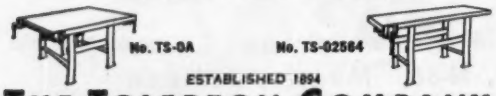
50% MORE HORIZONTAL PROJECT FLOOR LOCKER SPACE

WITH TOLCO'S "STOR-MOR" BASE



Tolco's "Stor-Mor" features exclusive steel splined tops of 100% laminated Northern hard maple. Twelve individual heavy gauge steel lockers—6 each side—ball point fasteners and mating pulls and lugs for padlocks. Available in baked green or gray enamel.

TOLERTON MAKES A COMPLETE LINE OF 2 AND 4 STUDENT BENCHES

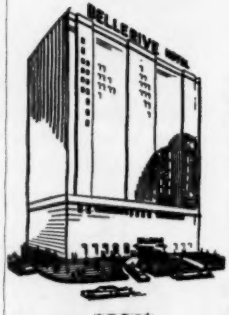


ESTABLISHED 1894

THE TOLERTON COMPANY

265 N. FREEDOM AVE. • ALLIANCE, OHIO

PREFERRED in KANSAS CITY, MO. by BUSINESSMEN, EXECUTIVES, FAMILIES



During certain convention periods, all available Kansas City hotel rooms are frequently taken.

You can be assured of comfortable accommodations in Kansas City, by writing for your FREE "Preferred Guest Card" from the Bellerive Hotel, today. The Bellerive—preferred by the family, and business executives for convenience and courteous hospitality at sensible rates—guarantees (with advance notice) reservations anytime of the year to you, the preferred guest. Ask for your "Preferred Guest Card", today . . . at no obligation. Free Radio & Television set in every Room. Rates from $4.50

100% AIR-CONDITIONED

Home of the famous Rhythm Room

Free Parking

BELLERIVE Hotel

214 East Armour at Warwick Boulevard

IN CHICAGO IT'S THE HAMILTON HOTEL

20 S. Dearborn Street

What's New ...

Light Weight and Ruggedness Combined in Tornado Vacuum

A recessed handle at the top permits easy carrying of the new Series 140 Torna-

do Vacuum Cleaner. It weighs only 24½ pounds, permitting its handling by any woman. The machine is 20 inches tall and 16 inches in diameter. It has a tank capacity of 7½ gallons and, with the water shut-off attachment, it picks up water or suds to leave the floor completely dry. The Tornado 140 has a complete set of attachments for all vacuum cleaning needs. **Breuer Electric Mfg. Co., 5100 N. Ravenswood Ave., Chicago 40.**

For more details circle #333 on mailing card.

Superior Waste Receptacle Has Independent Openings

Two independently swinging flap openings on the new Superior Waste Receptacle assure fast and safe waste disposal. Designed in three models for use in washrooms, playgrounds, cafeterias and other areas, the unit has a rainproof top which folds back for easy emptying. It is also interchangeable with existing tops. Stainless steel legs assure long life and eliminate rust. Flaps are available in stainless

steel or painted in a choice of colors. **Superior Metalware Div., John Wood Co., 509 Front Ave., St. Paul 3, Minn.**

For more details circle #334 on mailing card.

Oops! Wrong State

On page 140 of the June issue of The NATION'S SCHOOLS we published a story on the attractive line of cabinet storage units developed to match the Schemenauer line of Unit Ventilators. Imagine our chagrin when the manufacturer's address appeared as Holland, Michigan. The correct address is **Schemenauer Mfg. Co., Holland, Ohio.**

For more details circle #335 on mailing card.

Aero Relief Model Illustrates Geographical Terms

Sturdy plastic is used to form the Aero Geographical Terms Relief Model. It represents a part of the earth's surface, portraying the features as they would be seen from the air. A hypothetical coastline, with bays, peninsulas, mountains, valleys, rivers and every other geographical area is shown in three dimensional form, with natural colors indicating the tree and plant cover as well as the altitudes. The realistic appearance of the model makes it an effective teaching tool and the information shown was selected carefully by geographers. **Aero Service Corp., 210 E. Cortland St., Philadelphia 20, Pa.**

For more details circle #336 on mailing card.

(Continued on page 90)

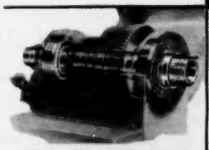
SHELDON *Precision* **LATHES**

CHICAGO U.S.A.

***Better* SCHOOL LATHES**

—for students

—for instructors



"Zero Precision" tapered roller bearings support the spindle, retain their accuracy, and eliminate costly bearing maintenance.

Modern Apron with new drop-lever friction disc type clutch for power feeds has a built-in safety interlock.

Quick Change gear box has wide number of pitches and feeds available, eliminates changes in end gearing, permits rapid selection of feeds while lathe is running.

OTHER QUALITY FEATURES INCLUDE:

CARRIAGE, HEADSTOCK AND TAILSTOCK HAND-SCRAPED TO BED.

LARGE MICROMETER DIALS, TAPERED TAKE-UP GIBS.

DOUBLE NEOPRENE V-BELTS TO SPINDLE

HEAVY, RUGGED BED

SHELDON PRECISION LATHES are standard in leading vocational schools and industrial arts shops. They are of modern industrial design — in weight, power, capacity, speed range, extreme accuracy, safety, ruggedness and long life. Hence they permit practical shop courses and worthwhile projects.

They accustom students to "big lathe" power and controls; to big lathe "feel" and performance, building student confidence satisfaction and skill. Still they are safer, with new safety switches, aluminum shear pins, safety color code, and all gearing, belts and drive pulleys completely enclosed.

They minimize supervision and work load requirements for instructors. They end laborious and costly maintenance. The large "Zero Precision" Taperer Roller Spindle Bearings hold their accuracy in spite of student abuse. Bearing maintenance is reduced to a fractional turn of a take-up collar after long hard usage.

Produced by modern methods in a specially equipped machine tool plant Sheldon Lathes are priced to school budgets.

Write for catalog describing 10", 11", and 13" lathes, Milling Machines and Shapers; and information on Sheldon Teaching Aids.

SHELDON MACHINE CO., INC.

4266 N. Knox Ave., Chicago 41, Illinois

CUSTOM-LINE

***Aluminum* HAT and COAT RACKS**

Tailored to fit any given wall area. Die cast aluminum brackets adjustable to exact centers . . . also adjustable as to height without removing from wall.

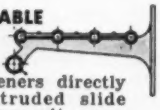
3 BASIC SHELVES

1. Hat shelves with hanger bar for coat hangers.

2. Hat shelves with staggered cast aluminum coat hooks.

3. Hat or utility "plain" shelves for stacked tiers for general use.

RIGID OR ADJUSTABLE MOUNTING



Brackets mount with standard fasteners directly on wall or in extruded slide mountings that permit easy change of heights.

Cast aluminum coat hooks can be staggered along the bottom shelf to give great capacity in small space.

MODERN ANODIZED FINISHES

Tubing comes in clear, or gold color, deep etched anodized finishes . . . with closed ends. Cast aluminum brackets and hooks come in black, silver luster or brass hammertone finishes. All combinations available.

FLOOR LAYOUT SERVICE

Let our cloakroom and checkroom specialists suggest equipment requirements and efficient layout. Just send outline of available space, capacity desired and nature of load. No obligations, of course.

Write for Catalog CL-25 113

VOGEL-PETERSON CO.
1121 W. 37th St. • Chicago 9, Ill.

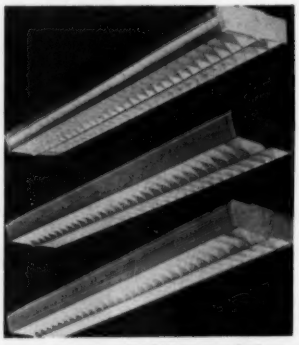
Vinyl Plastic Used for Floor Mats

Traffic King floor mats are now fabricated in vinyl plastic for long life and non-slip footing wet or dry. Segments of the mat are woven on dust-resistant galvanized steel spring wire with openings too small to catch shoe heels. The new mats are lighter in weight and easier to handle than earlier models. They have increased cushioning effect and give longer wear. Dirt stays on the surface of the plastic mats, making them easy to clean. The Traffic King is designed to go under all doors with ¼ inch or more clearance. It is available in 15 fade-resistant colors in a wide variety of patterns. **American Mat Corp., 1717 Adams St., Toledo 2, Ohio.**

For more details circle #337 on mailing card.

Stylist Lighting Fixtures Feature Economy in Use

Easy, economical installation and maintenance are features of the new Stylist series of lighting fixtures. The line offers



a choice of three shieldings and three different side panels, all interchangeable. The choice of shieldings permits the one fixture, with different shieldings, to be used in various locations with the proper shieldings for each need.

Stylist fixtures are easily installed with either standard stem sets or slide grip hangers. Spring latches on the louver-cover assembly permits installation or removal without tools. The Stylist is shallow, has low-cost maintenance and is easily cleaned. **Electro Lighting Corp., 1535 S. Paulina St., Chicago 8.**

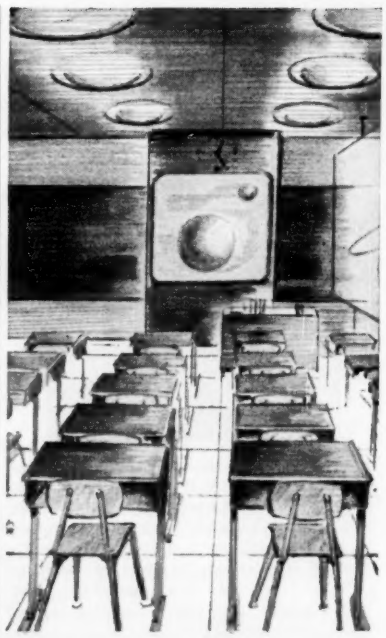
For more details circle #338 on mailing card.

Portable Atomic Laboratory for Science Instruction

High school and college science classes can now have an atomic laboratory at low cost. The Model AK-3 is a compact, portable and complete atomic laboratory that has research accuracy. It is designed for science instruction as well as providing an economical installation for research workers with limited budgets. It features a compact, versatile scaler-ratemeter and a range of accessories for all types of atomic science training programs, research measurements with geiger tubes and scintillation counters and applications employing tracers. **Nucleonic Corp. of America, 196 Degraw St., Brooklyn 31, N.Y.**

For more details circle #339 on mailing card.

(Continued on page 91)



modern classroom

modern seating

by *Arlington*

A complete selection of quality school furniture, in sizes and types for every school and grade. Modern design, modern colors and proved construction.

and TEACHER'S DESKS, single and double pedestal types. In colors and design to match classroom seating.

For information write for Catalog 58.

ARLINGTON SEATING COMPANY
ARLINGTON HEIGHTS • ILLINOIS

What's New ...

Two Colorful Developments in Wall and Floor Tiles

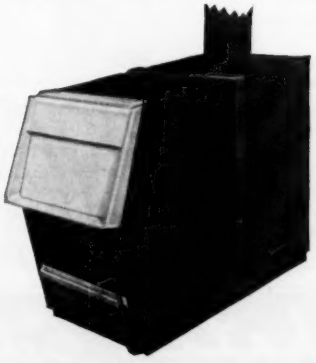
A whole new range of beautiful effects can be achieved with the two new tiles introduced by American-Olean Tile Company. The new Crystalline Tiles were developed especially for use on floors, countertops and window sills.

Scored Tiles with Crystalline Glazes are a new type of tile permitting unlimited design opportunities for floor and wall treatments with a rich appearance, yet with economical installation cost. They combine the flexibility of small unit design with the economy and easy installation of larger self-spacing units. Scored Tile is a 4¼-inch square glazed interior tile with straight grooves cut into the surface. **American-Olean Tile Co., Lansdale, Pa.**

For more details circle #340 on mailing card.

Portable Disposalls For Heavy Duty Waste Burning

Four to six drums of waste can be burned in a day with the new Goder Heavy Duty



Deluxe Disposalls. The large sized portable units were especially designed for handling institutional waste with minimum effort. The inclined front closing door is operated by the E-Z foot pedal which leaves the hands free to handle waste drums.

A series of inclined, staggered step grates keeps the waste material moving downward, with precisely sufficient oxygen exposure for an all-consuming fire. Smoke, odor and heat loss are reduced. The secondary combustion chamber completely destroys all remaining residue as well as fly ash. The new Disposalls are ruggedly constructed for efficient operation. **Joseph Goder Incinerators, 4241 N. Honore St., Chicago 13.**

For more details circle #341 on mailing card.

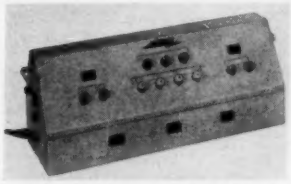
Hydraulic Parkmaster Is Seven-Unit Power Mower

Seven Spartan gang mowers on the hydraulic Parkmaster permits the cutting of 15-foot swaths. A single hydraulic valve raises or lowers the first three gang mowers and the other four have individual hydraulic controls. The flexible unit "over-rides" tree-trunks, sand traps and other obstacles without changing course, yet it is as maneuverable in tight places as on the straightways of campus or park. **Toro Mfg. Corp., 3042 Snelling Ave., Minneapolis 6, Minn.**

For more details circle #342 on mailing card.

Four-Station Power Supply Converts to Electrical Bench

Instant conversion of any shop workbench to an electrical bench is now possible with the new Crow 4-Station Student Power Supply. Model 620-R is a compact, portable unit providing a practical, economical source for low voltage AC and DC power. It plugs into any standard 115 volt AC outlet and has six standard outlets conveniently located for motors, soldering irons and other equipment. It can be used by as many as eight students at a time, thus providing facilities where space is at a premium. The easily replaceable panel fuses give complete protection against overload. The unit is 26 by 10 inches in size, is easily carried in its attrac-



tive metal cabinet built to withstand hard usage, and requires minimum storage space. **Universal Scientific Co., Inc., Vincennes, Ind.**

For more details circle #343 on mailing card.

(Continued on page 92)

EDWARDS CLOCK AND PROGRAM SYSTEMS

–because
they are uniquely simple,
quality constructed
–are unrivalled for accurate,
trouble-free performance.

- Famous Telechron® motor eliminates coasting and scattering. No master clock needed.

- Instant reset action after power failure.

- Schedule on program instrument easily changed by school personnel, without a service call.

Write for complete new fact file on school signaling, including intercom and fire alarm systems too. Edwards Company, Inc., Norwalk, Connecticut. (In Canada: Edwards of Canada, Ltd, Owen Sound, Ontario)

EDWARDS

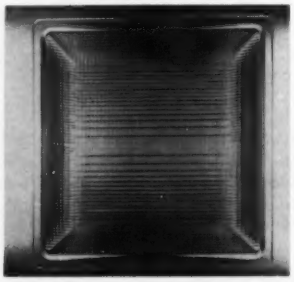
Specialists in signaling since 1872

DESIGN • DEVELOPMENT • MANUFACTURE

What's New ...

Impact Resistant Corridor Lens Produces Two Beams of Light

Designed to produce two beams of light up and down a corridor, with low bright-



ness control on the end zones, the new Corning corridor lens is tempered for heat and impact resistance. The engineered optical design gives prismatic control of light distribution which is described as ideal for school corridors, especially where lockers line the hallway. The lens is suited to any corridor-type installation as well as for libraries and outdoor canopies. **Corning Glass Works, Corning, N.Y.**

For more details circle #344 on mailing card.

Auditorium Air Conditioner Provides Heating and Cooling

The new Nesbitt AudiCon is an auditorium air conditioner in the full sense of the word. It is designed to provide year round comfort for high occupancy areas of the school, including auditoriums, gymnasiums, libraries and general purpose rooms. Heating, ventilating and natural cooling are provided in cold weather, while in warm weather the same unit provides dehumidification, mechanical cooling and ventilation.

The return air bypass is an exclusive control feature of the new AudiCon, in which outdoor air required for ventilation must pass through the cooling element. Outdoor air is thus dehumidified while being cooled and ventilated. Designed to operate at highest delivery with the least possible noise, the AudiCon is particularly adaptable to auditorium use. An exclusive silencer discharge plenum further minimizes any operational sounds. The AudiCon installed in a properly designed system for heating, can have cooling added later without relocating. **John J. Nesbitt, Inc., State Rd. & Rhawn, Philadelphia 36, Pa.**

For more details circle #345 on mailing card.

PC-6 Detergent Has Germ-Killing Agent

The sterile-clean areas required in food preparation and service areas, as well as in other parts of the institution, can be provided with the new PC-6 Detergent which has a germ-killing agent. The new product has a high phenol coefficient, yet has superior cleaning ability. Even when diluted with 120 parts water, PC-6 is said to retain its germ-killing potency. Laboratory tests indicate it to be effective against all bacteria, virus, fungus and algae. It is described as effective for low-cost sanitizing and maintenance cleaning of tiled floors, painted surfaces and washroom facilities. **The Penetone Co., 74 Hudson Ave., Tenafly, N.J.**

For more details circle #346 on mailing card.

Friction Type Music Stands Are Fully Adjustable

Three styles are available in the new lightweight 'Just-o-matic music stands. Each has the friction type adjustable feature which permits finger tip adjustment for height and desk tilt and weighs less than five pounds. They have unbreakable cast aluminum bases, aluminum desks

and brackets and nylon friction type adjustment devices. Brushed aluminum trim is offered on the #20 and #30 styles while the #40 style is of more traditional design and finished in gray or black. **Wenger Music Equipment Co., Box 300, Owatonna, Minn.**

For more details circle #347 on mailing card.

(Continued on page 93)

QUADRALINE
by american desk

Available in graduated heights, the No. 600 Chair Desk is designed to provide maximum work area, ease of entry, proper elbow support. Fibre-plastic top size 23" x 21". Available with Fibre-glass back and seat.

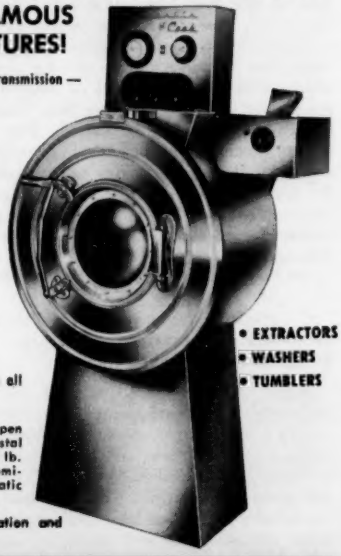
american desk manufacturing co. d d *temple, texas*

Washette by Cook
AMERICA'S LEADING OPEN-END WASHER

- HEAVY-DUTY STAINLESS STEEL CONSTRUCTION
- DEPENDABLE LOW COST PRODUCTION

CHECK THESE FAMOUS WASHETTE FEATURES!

- Dodge Friction-Free Power Transmission — 2 Year Warranty!
- Heavy-Duty Trouble-Free Master Motor
- Famous One-Dial Control, 25 Formulas
- Water-Gard deletes fill and drain time for formula sequence.
- Easy to Operate — requires minimum maintenance.
- Orders shipped in 48 hours on all standard electric models.



- EXTRACTORS
- WASHERS
- TUMBLERS

The ONLY complete line of open end-washers, Cabinet and Pedestal styles, 25, 50, 75 and 100 lb. capacities; Controls: Manual, Semi-Automatic, Automatic; Automatic available with supply injector.

Write for complete information and FREE brochures.

Cook Machinery Co., Inc.
4301 S. Fitzhugh Ave. Dallas 10, Texas

What's New ...

Automatic Change Dispenser Eliminates Errors

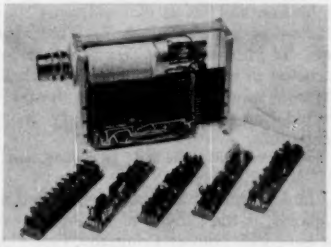
Speed and accuracy in making change in cafeterias and other operations can be

assured with the new change-dispensing cash register introduced by National Cash Register Company. The correct amount of change due is calculated and dispensed automatically when the sale is rung up and the bill received is recorded by the cashier. The correct change is released automatically to the customer through the automatic coin dispenser which may be located away from the register for convenience. Paper bills, of course, will be handled by the cashier but the correct number is recorded on the machine, again assuring accuracy. A warning buzzer indicates when the supply of coins is running low and the dispenser will not work when any coin channel is empty. **National Cash Register Co., Dayton 9, Ohio.**

For more details circle #348 on mailing card.

Transistorized TV Camera Is Size of Book

A fully transistorized automatic television camera is now available from Dage Television Division of Thompson Products. Including all of the technical features of broadcast equipment, the new miniature camera weighs approximately four pounds and is only 2⅜ by 5⅜ by 7¾ inches in size. The miniature size is possible since



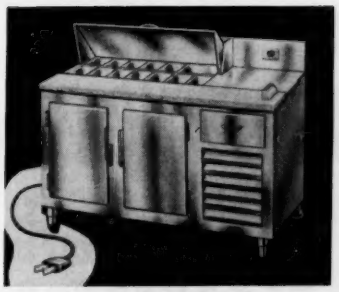
tubes are replaced with transistors and wires with printed circuits. The camera is self-contained, reducing the tangle of interconnecting electric lines to only one coaxial cable, thus simplifying operation and handling. All necessary auxiliary equipment is built into the miniature unit which will operate on almost any power supply.

The new camera has an electronic and automatic light level compensator. The coaxial cable may also be used to transmit current to the camera from a remote point, permitting remote operation. The modular construction facilitates and speeds maintenance of the new camera. **Dage Television Div., Thompson Products, Inc., Michigan City, Ind.**

For more details circle #349 on mailing card.

Self-Contained Sandwich Unit Ready for Plug-In Operation

Everything required for sandwich making for lunchroom or cafeteria service is incorporated into one unit in the enlarged Model 661BS of the Flex-O-Unit Self-Contained Sandwich Unit. When plugged into an ordinary outlet, the new unit provides toaster and refrigerated storage space. Other features include an enlarged maple work-top, 13 stainless steel salad pans, stainless steel bread drawer, and



two service valves for easy access in servicing the unit. **Stainless Food Equipment Co., 272 New St., Newark 3, N.J.**

For more details circle #350 on mailing card.

(Continued on page 94)

West Ridge School, Greece, N.Y. ● Architect: Benedict Ade—Rochester
Consulting Engineer: Robson & Woese, Inc.,—Rochester

thanks to a SPENCER VACUSLOT® system

Positive sanitation and economy of maintenance were *planned into* this modern new school.

A Spencer Vacuslot system, with vacuum producer and dirt separator in the utility room and piping to inlet valves throughout the building, makes possible *quick, thorough* cleaning.

For routine maintenance of corridors and classrooms, large dry mops are used to push dirt and litter to the Vacuslot, where powerful vacuum whisks it away. Dry mops are then *vacuum* cleaned simply by passing back and forth across the Vacuslot.

This versatile system is also used for conventional vacuum cleaning, eraser cleaning, water pick-up (in conjunction with a portable wet separator) and for boiler tube cleaning.

If you're interested in built-in, cost cutting convenience and the positive sanitation that only *vacuum* cleaning can provide, it will pay to check with Spencer.

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• Descriptive Bulletin No. 153C
• Showing of new 20 minute color movie.

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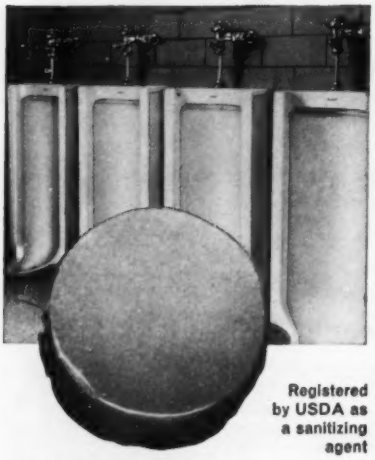

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Here is a new way to neutralize smelly, organic matter in urinals. When moisture hits the blockette, an anti-bacterial chemical vapor is released that deodorizes and sanitizes by an immediate, almost total chemical destruction of bacteria. Tests show 94.4% bacterial count reduction. You must be satisfied or your money will be refunded.

See the Man Behind the Drum . . . your Huntington representative for full details. Ask him for a sample of Odor Bar Blockettes.

HUNTINGTON LABORATORIES
INCORPORATED
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Tempo Teacher's Desk Available in Colors

Designed to match the Tempo line of classroom furniture, the new Griggs Tempo Teacher's Desk has a welded tubular steel frame finished in infra-red baked-on enamel

in Beige, Dove Grey, Sage Green, Coral and Ocean Blue. It is available in a single or a double pedestal style, the former with a 30 by 42-inch Plastex top and the latter with a 30 by 60-inch Plastex top. Large storage space and a graceful, uncluttered design are features of the new desk. **Griggs Equipment, Inc., Belton, Texas.**

For more details circle #351 on mailing card.

Literature and Services

• A comprehensive report on the design flexibility afforded by the use of **Acousti-Lux Panels** is presented in a 12-page brochure published by The Celotex Corp., 120 S. La Salle St., Chicago 3.

For more details circle #352 on mailing card.

• **How Couch Modulator Fire Alarm Systems** protect life and property is discussed in **Bulletin 131**, released by S. H. Couch Co., Inc., North Quincy 71, Mass. In addition to complete specifications and details on the system, the 25-page bulletin points out how the modular units facilitate expansion as the institution grows.

For more details circle #353 on mailing card.

• **Deluxe Steel Shelving** is the subject of **Catalog No. 30** released by Deluxe Metal Furniture Co., Warren, Pa. The 64-page booklet, designed to assist users in selecting the proper shelving for all requirements, gives detailed suggestions. Divided into five sections, the catalog covers Deluxe boltless steel storage shelving, shop items, Deluxe Verti-File open shelf filing equipment, Deluxe library shelving and wardrobe cabinets.

For more details circle #354 on mailing card.

• The theory of arithmetic, its structure and the fundamental laws essential to a child's understanding of the subject are covered in a new 16-page booklet offered by the Monroe Calculating Machine Co., Orange, N.J. Entitled **"Arithmetic Minus Mystery Equals Understanding,"** the booklet was written by Allan J. Ross, Educational Director, and is offered as **Form B-251.**

For more details circle #355 on mailing card.

• The American Institute of Timber Construction, 1757 K St. N.W., Washington 6, D.C., announces the publication of a 16-page brochure entitled **"A Question of Value and Your Community Dollars."** It is a non-technical presentation of new scientific uses of wood as an engineering material in the construction of modern schools.

For more details circle #356 on mailing card.

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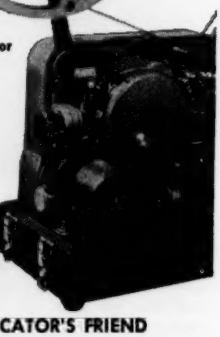

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• **Lifetime Quality Drafting and School Equipment** is the subject of a new 24-page general catalog issued by the Stacor Equipment Co., 295 Emmet St., Newark 5, N.J. Sizes, dimensions on each size and other specifications are tabulated for each piece of equipment, including new products and new lines. Drawings and photographs illustrate design and construction details.

For more details circle #357 on mailing card.

• **Bulletin 2701 on "Sportslighting for Night Football"** is available from Crouse-Hinds Co., Syracuse 1, N.Y. The advantages of floodlighting for football are discussed in the 8-page bulletin which also features sportslighting layouts based on Illuminating Engineering Society recommendations.

For more details circle #358 on mailing card.

• Hanley facing material, both glazed and unglazed, is the subject of a 12-page catalog issued by Hanley Company, One Gateway Center, Pittsburgh 22, Pa. Color is used with the text in illustrating the broad range of color, size and texture of **"Hanley Brick & Tile."**

For more details circle #359 on mailing card.

• **Cutler Toilet Compartment Catalog, No. T.C. 58,** contains complete specifications on Cutler Ceiling-Hung, Floor-Supported and Overhead-Braced Toilet Compartments. Color swatches are also included in the catalog, available from Cutler Metal Products Co., 1025 Line St., Camden, N.J.

For more details circle #360 on mailing card.

(Continued on page 95)

What's New . . .

• The recently published **Remington Rand 99 Printing Calculator Course** is available from Remington Rand Div. of Sperry Rand Corp., 315 Fourth Ave., New York 10. The course is composed of four pieces of printed matter: "Methods of Teaching the Calculator That Prints," Machine Station Manual, Student Workbook and an oversized Wall Chart of the Model 99 Calculator.

For more details circle #361 on mailing card.

• **Wilton Drill Press Vises** are the subject of a new catalog released by Wilton Tool Mfg. Co., Inc., 9525 Irving Park Rd., Schiller Park, Ill. Completely new as well as improved vises in the Wilton line are included in the descriptive material in the catalog.

For more details circle #362 on mailing card.

• The history of libraries, furniture and its construction, and typical library installations are covered in **File No. 35-B**, a new library furniture catalog released by Standard Wood Products Corp., 10 Columbus Circle, New York 19. Information is also given on the company's library planning service.

For more details circle #363 on mailing card.

"Keys to Music," series of 20 films designed to provide a basic musical education and the ability to play a keyboard instrument such as an organ or piano, for elementary pupils, with "Teacher's Guide" and record of film lessons. **Thomas Organ Co., 8345 Hayvenhurst Ave., Sepulveda, Calif.**

For more details circle #364 on mailing card.

• **"School Construction With Rilco Laminated Wood"** is the title of a catalog released by Rilco Laminated Products, Inc., W-819 First National Bank Bldg., St. Paul 1, Minn. Illustrations and schematic floor plans supplement the text in the booklet which shows how money can be saved with the use of glued laminated wood arches, beams and trusses in the construction of modern schools.

For more details circle #365 on mailing card.

• **"Better Fruit Dishes With Low-Moisture Fruits"** is the title of a handy 44-page quantity recipe book just released by the Vacu-Dry Co., 950 56th St., Oakland 8, Calif. Forty selected recipes for stewed fruits, sauces, pies, pastries, cakes, cookies, breads, puddings and other desserts are included, featuring Low-Moisture Fruits. Information on time-saving through use of Low Moisture Fruits, since preparation time is eliminated, as well as the savings in storage space is included.

For more details circle #366 on mailing card.

• **Chester All-Aluminum Swimming Pools** are the subject of a new catalog available from Chester Products Co., Division of Ransohoff, Inc., N. Fifth St. at Ford Blvd., Hamilton, Ohio. The all-aluminum pools are available in Olympic and A.A.U. standard sizes, or custom-designed to the desired size. Free of rust, cracks, leaks or seepage, the aluminum pools are described as inexpensive to maintain, strong, quick and easy to install and available in any desired design.

For more details circle #367 on mailing card.

• **"Custom School Storage Furniture"** is the subject of an attractively printed catalog offered by St. Charles Mfg. Co., St. Charles, Ill. Bound to lie flat in use, the comprehensive booklet gives full descriptive information, with line drawings of appearance and construction features, on the full line of food lab, clothing lab and arts and crafts equipment for school use. Construction specifications are presented in a special section.

For more details circle #368 on mailing card.

"Space for Learning," 15-minute free color film for administrators, school boards, architects, builders, parent-teacher groups, and others concerned with the design and use of schools. **Service Library, California Redwood Assn., 576 Sacramento St., San Francisco 11, Calif.**

For more details circle #369 on mailing card.

• How paperwork can be simplified by use of the **Bruning Copyflex Process** is discussed in a 12-page booklet available from the Charles Bruning Co., Inc., 1802 Central Rd., Mount Prospect, Ill. The Copyflex diazotype copying process and its uses are illustrated and described.

For more details circle #370 on mailing card.

• A brochure describing **films for the physical sciences**, both motion pictures and filmstrips, is offered by United World Films, Inc., 1445 Park Ave., New York 29. Included are descriptions of an Atomic Physics Series, a series on Light, three films on Sound and five subjects on Physical and Mathematical Geography.

For more details circle #371 on mailing card.

(Continued on page 96)

Certainly!

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"they stay attractive longer . . . withstand hard use"

The rugged construction and functional beauty of Clapper's Tables make them stand out in countless school installations across the country. Their permanently smooth, Self-Edge formica tops stay bright and sanitary . . . the heavy enameled understructure stays locked and rigid. Clapper's Tables are practical, economical and in the widest choice of colors. Standard sizes . . . full 30" high . . . corrosion proof exposed surfaces.

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802 Burlington Ave. Kewanee, Illinois

• **Catalog GEC-1032B** covers the subject of low-voltage distribution equipment and components available from the Distribution Unit, General Electric Co., Plainville, Conn. The 144-page **1958 General Catalog,** issued jointly by the Circuit Protective Devices and Distribution Assemblies Departments of the company, provides condensed information on all products of the two departments.

For more details circle #372 on mailing card.

• **Trampolines for every age,** from the "Tiny Tramp" for small children to the "Collegian" which meets all AAU and inter-collegiate specifications, are described and illustrated in the new catalog released by American Trampoline Co., Jefferson, Iowa. Also included are "Dive-O-Tramps" for pools, and Trampoline accessories.

For more details circle #373 on mailing card.

"Texas Star" and "Hoosier Promenade," last two 16mm films in the "Let's Square Dance" series designed to enable the non-expert to teach square dancing, color or black and white, with complete kit of teaching materials, including records with and without calls and an illustrated manual. **Indiana University, Audio-Visual Center, Bloomington, Ind.**

For more details circle #374 on mailing card.

• Line drawings showing operation of the **Praetorian Unit Ventilator** and tables of capacities are among the facts presented in a new folder released by the Valveblower Co. of California, 13729 E. Rosecrans Ave., Santa Fe Springs, Calif. Descriptive data and specifications are also included.

For more details circle #375 on mailing card.

Film Releases

"Microscopic Life: The World of the Invisible," 14 minutes, "Life in the Sea," 11 minutes, "Jamestown," 22 minutes, "Tom Savage, "22 minutes, "Heat—Its Nature and Transfer," 11 minutes, "Art in the Western World," 30 minutes, "Puss in Boots," 16 minutes, all 16mm sound films, and "Canada: People at Work," a series of six color filmstrips. **Encyclopaedia Britannica Films, Inc., 1150 Wilmette Ave., Wilmette, Ill.**

For more details circle #376 on mailing card.

Suppliers' News

Charles Beseler Co., East Orange, N.J., manufacturer of projectors and other audio-visual equipment, announces its purchase of **Projection Optics Co., Inc.,** manufacturer of lenses and precision optical equipment.

Metalab Equipment Co., 270 Duffy Ave., Hicksville, L.I., N.Y., manufacturer of wood laboratory furniture and equipment, announces the full-scale operation of its new plant, the **Metalab-Labcraft Division of the Norbute Corp.,** with **Arthur R. Salveson** in charge of educational sales.

Simoniz Company, 2100 Indiana Ave., Chicago 16, manufacturer of maintenance products, announces the reorganization of its **Commercial Products Division** as an independent marketing unit within the organizational structure of the company, with **H. C. Rains** as manager of the division.

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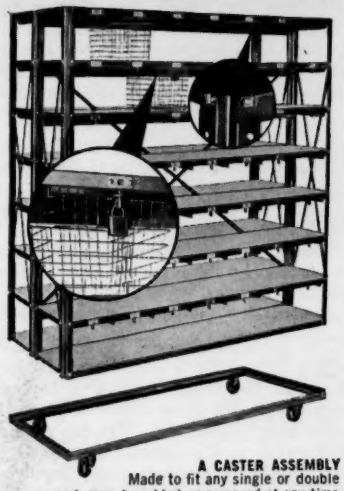

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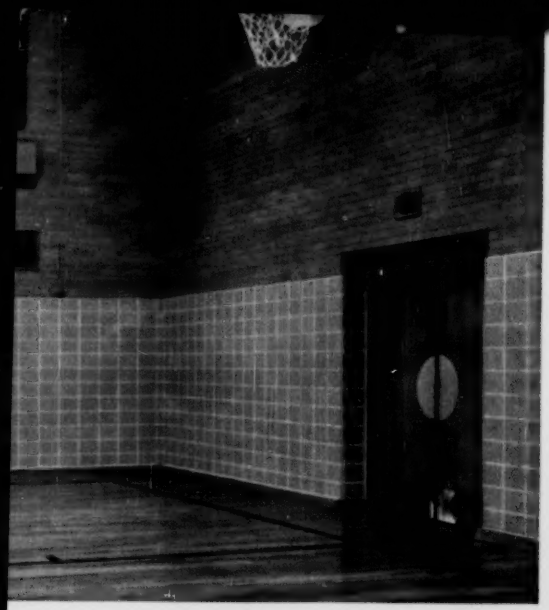

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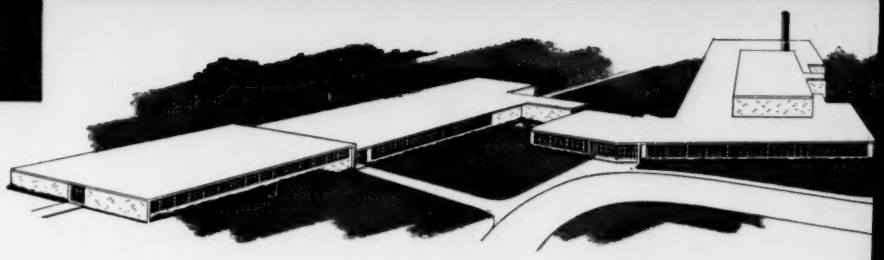

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